

ALASKA

Science and Engineering Profile

	AK	U.S.	Rank		AK	U.S.	Rank
Doctoral scientists, 1995	1,174	453,928	49	Total R&D performance, 1995 (millions)	\$163	\$177,210	47
Doctoral engineers, 1995	149	86,738	49	Industry R&D, 1995 (millions)	\$30	\$130,332	46
S&E doctorates awarded, 1996	28	27,230	51	Academic R&D, 1995 (millions)	\$72	\$21,606	42
of which, in life sciences	46%	25%		of which, in environmental sciences	47%	6%	
in environmental sciences	25%	3%		in life sciences	24%	55%	
in physical sciences	14%	14%		in physical sciences	20%	10%	
S&E postdoctorates, 1995	4	35,379	52	Higher education current-fund expenditures, 1995 (millions)	\$356	\$182,602	50
in doctorate-granting institutions							
S&E graduate students, 1995	600	436,328	52	Number of SBIR awards, 1990-1996	13	26,399	48
in doctorate-granting institutions				Patents issued to state residents, 1996	36	61,099	50
Population, 1996 (000s)	607	269,067	49	Gross state product, 1994 (billions)	\$22.7	\$6,876.0	47
Civilian labor force, 1996 (000s)	316	135,528	50	of which, agriculture	2%	2%	
Personal income per capita, 1996	\$24,558	\$24,231	20	manufacturing, mining, construction	28%	23%	
Federal spending				transportation, communication, utilities	17%	9%	
Total expenditures, 1996 (millions)	\$4,341	\$1,368,858	47	wholesale and retail trade	10%	16%	
R&D obligations, 1995 (millions)	\$97	\$67,080	42	finance, insurance, real estate services	11%	19%	
				government	12%	20%	
					21%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Alaska by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	96,915	60,545	0	8,729	24,411	635	2,595	42
Department of Agriculture	7,222	5,423	0	0	1,799	0	0	42
Department of Commerce	32,625	30,970	0	0	1,527	0	128	10
Department of Defense	10,451	1,495	0	7,544	1,412	0	0	44
Department of Energy	302	0	0	253	49	0	0	49
Dept. of Health & Human Services	2,793	446	0	80	1,886	100	281	49
Department of the Interior	24,531	22,211	0	226	1,727	0	367	4
Department of Transportation	1,219	0	0	0	0	0	1,219	43
Environmental Protection Agency	1,224	0	0	496	128	0	600	35
Nat'l Aeronautics & Space Admin.	8,606	0	0	0	8,606	0	0	29
National Science Foundation	7,942	0	0	130	7,277	535	0	42
State rank	42	28	na	44	44	50	30	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

ALABAMA

Science and Engineering Profile

	AL	U.S.	Rank		AL	U.S.	Rank
Doctoral scientists, 1995	4,853	453,928	28	Total R&D performance, 1995 (millions)	\$1,681	\$177,210	25
Doctoral engineers, 1995	1,370	86,738	20	Industry R&D, 1995 (millions)	\$686	\$130,332	31
S&E doctorates awarded, 1996	314	27,230	25	Academic R&D, 1995 (millions)	\$335	\$21,606	23
of which, in life sciences	31%	25%		of which, in life sciences	66%	55%	
in engineering	25%	23%		in engineering	13%	16%	
in physical sciences	15%	14%		in physical sciences	7%	10%	
S&E postdoctorates, 1995	429	35,379	24	Higher education current-fund expenditures, 1995 (millions)	\$2,958	\$182,602	21
in doctorate-granting institutions							
S&E graduate students, 1995	6,313	436,328	22	Number of SBIR awards, 1990-1996	434	26,399	16
in doctorate-granting institutions				Patents issued to state residents, 1996	278	61,099	35
Population, 1996 (000s)	4,273	269,067	23	Gross state product, 1994 (billions)	\$88.7	\$6,876.0	25
Civilian labor force, 1996 (000s)	2,088	135,528	23	of which, agriculture	2%	2%	
Personal income per capita, 1996	\$20,055	\$24,231	40	manufacturing, mining, construction	27%	23%	
Federal spending				transportation, communication, utilities	10%	9%	
Total expenditures, 1996 (millions)	\$23,410	\$1,368,858	19	wholesale and retail trade	16%	16%	
R&D obligations, 1995 (millions)	\$2,016	\$67,080	11	finance, insurance, real estate services	12%	19%	
				government	16%	20%	
					16%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Alabama by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	2,016,252	642,257	0	1,159,369	194,411	17,882	2,333	11
Department of Agriculture	16,158	4,950	0	0	11,123	0	85	31
Department of Commerce	2,025	515	0	150	1,323	0	37	35
Department of Defense	1,324,964	359,663	0	951,042	13,593	666	0	10
Department of Energy	34,131	50	0	29,381	4,501	199	0	22
Dept. of Health & Human Services	127,447	0	0	2,286	110,381	13,982	798	22
Department of the Interior	4,085	3,416	0	0	669	0	0	32
Department of Transportation	2,592	1,004	0	0	208	0	1,380	32
Environmental Protection Agency	4,333	0	0	1,514	1,390	1,429	0	23
Nat'l Aeronautics & Space Admin.	487,012	272,659	0	174,921	37,793	1,606	33	5
National Science Foundation	13,505	0	0	75	13,430	0	0	31
State rank	11	5	na	10	21	19	31	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

ARKANSAS

Science and Engineering Profile

	AR	U.S.	Rank		AR	U.S.	Rank
Doctoral scientists, 1995	2,115	453,928	40	Total R&D performance, 1995 (millions)	\$330	\$177,210	44
Doctoral engineers, 1995	263	86,738	45	Industry R&D, 1995 (millions)	\$181	\$130,332	42
S&E doctorates awarded, 1996	65	27,230	42	Academic R&D, 1995 (millions)	\$88	\$21,606	39
of which, in life sciences	48%	25%		of which, in life sciences	75%	55%	
in engineering	23%	23%		in engineering	12%	16%	
in physical sciences	14%	14%		in physical sciences	5%	10%	
S&E postdoctorates, 1995	80	35,379	39	Higher education current-fund expenditures, 1995 (millions)	\$1,211	\$182,602	37
in doctorate-granting institutions							
S&E graduate students, 1995	1,681	436,328	43	Number of SBIR awards, 1990-1996	17	26,399	47
in doctorate-granting institutions				Patents issued to state residents, 1996	114	61,099	42
Population, 1996 (000s)	2,510	269,067	34	Gross state product, 1994 (billions)	\$50.6	\$6,876.0	32
Civilian labor force, 1996 (000s)	1,234	135,528	34	of which, agriculture	5%	2%	
Personal income per capita, 1996	\$18,928	\$24,231	48	manufacturing, mining, construction	29%	23%	
Federal spending				transportation, communication, utilities	12%	9%	
Total expenditures, 1996 (millions)	\$12,076	\$1,368,858	34	wholesale and retail trade	16%	16%	
R&D obligations, 1995 (millions)	\$98	\$67,080	41	finance, insurance, real estate services	11%	19%	
				government	14%	20%	
					12%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Arkansas by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	97,724	57,563	0	3,016	32,766	3,138	1,241	41
Department of Agriculture	16,276	6,126	0	480	9,553	83	34	30
Department of Commerce	23	0	0	23	0	0	0	51
Department of Defense	4,192	1,929	0	602	1,661	0	0	48
Department of Energy	72	0	0	0	72	0	0	51
Dept. of Health & Human Services	66,972	45,858	0	847	16,899	3,035	333	30
Department of the Interior	3,763	3,650	0	0	113	0	0	34
Department of Transportation	1,205	0	0	319	12	0	874	44
Environmental Protection Agency	692	0	0	442	230	20	0	40
Nat'l Aeronautics & Space Admin.	1,667	0	0	293	1,374	0	0	45
National Science Foundation	2,862	0	0	10	2,852	0	0	52
State rank	41	29	na	48	42	37	45	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

ARIZONA

Science and Engineering Profile

	AZ	U.S.	Rank		AZ	U.S.	Rank
Doctoral scientists, 1995	5,598	453,928	25	Total R&D performance, 1995 (millions)	\$1,995	\$177,210	24
Doctoral engineers, 1995	1,730	86,738	16	Industry R&D, 1995 (millions)	\$1,356	\$130,332	21
S&E doctorates awarded, 1996	465	27,230	19	Academic R&D, 1995 (millions)	\$380	\$21,606	19
of which, in engineering	28%	23%		of which, in life sciences	40%	55%	
in life sciences	19%	25%		in physical sciences	32%	10%	
in physical sciences	17%	14%		in engineering	12%	16%	
S&E postdoctorates, 1995	417	35,379	25	Higher education current-fund expenditures, 1995 (millions)	\$1,985	\$182,602	30
in doctorate-granting institutions							
S&E graduate students, 1995	7,427	436,328	19	Number of SBIR awards, 1990-1996	433	26,399	17
in doctorate-granting institutions				Patents issued to state residents, 1996	1,062	61,099	19
Population, 1996 (000s)	4,428	269,067	21	Gross state product, 1994 (billions)	\$94.1	\$6,876.0	24
Civilian labor force, 1996 (000s)	2,249	135,528	21	of which, agriculture	2%	2%	
Personal income per capita, 1996	\$20,989	\$24,231	37	manufacturing, mining, construction	21%	23%	
Federal spending				transportation, communication, utilities	9%	9%	
Total expenditures, 1996 (millions)	\$21,819	\$1,368,858	22	wholesale and retail trade	17%	16%	
R&D obligations, 1995 (millions)	\$915	\$67,080	19	finance, insurance, real estate	18%	19%	
				services	19%	20%	
				government	14%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Arizona by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	915,087	177,935	29,099	528,327	170,299	6,198	3,229	19
Department of Agriculture	20,254	14,016	0	80	6,133	0	25	24
Department of Commerce	2,371	0	0	1,070	723	0	578	32
Department of Defense	656,556	134,529	0	497,168	24,799	20	40	16
Department of Energy	6,288	0	0	160	6,128	0	0	33
Dept. of Health & Human Services	83,220	15,647	0	1,355	60,267	4,939	1,012	27
Department of the Interior	8,995	8,230	0	94	671	0	0	17
Department of Transportation	3,352	0	0	2,163	40	0	1,149	28
Environmental Protection Agency	3,066	0	0	1,149	1,917	0	0	25
Nat'l Aeronautics & Space Admin.	69,580	5,513	0	24,271	38,575	796	425	13
National Science Foundation	61,405	0	29,099	817	31,046	443	0	10
State rank	19	17	16	15	23	32	25	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

CALIFORNIA

Science and Engineering Profile

	CA	U.S.	Rank		CA	U.S.	Rank
Doctoral scientists, 1995	57,927	453,928	1	Total R&D performance, 1995 (millions)	\$36,133	\$177,210	1
Doctoral engineers, 1995	13,900	86,738	1	Industry R&D, 1995 (millions)	\$28,710	\$130,332	1
S&E doctorates awarded, 1996	3,385	27,230	1	Academic R&D, 1995 (millions)	\$2,594	\$21,606	1
of which, in engineering	23%	23%		of which, in life sciences	57%	55%	
in life sciences	21%	25%		in engineering	13%	16%	
in psychology	17%	13%		in physical sciences	12%	10%	
S&E postdoctorates, 1995	6,493	35,379	1	Higher education current-fund expenditures, 1995 (millions)	\$20,741	\$182,602	1
in doctorate-granting institutions							
S&E graduate students, 1995	43,755	436,328	1	Number of SBIR awards, 1990-1996	6,021	26,399	1
in doctorate-granting institutions				Patents issued to state residents, 1996	10,473	61,099	1
Population, 1996 (000s)	31,878	269,067	1	Gross state product, 1994 (billions)	\$875.7	\$6,876.0	1
Civilian labor force, 1996 (000s)	15,596	135,528	1	of which, agriculture	2%	2%	
Personal income per capita, 1996	\$25,144	\$24,231	13	manufacturing, mining, construction	18%	23%	
Federal spending				transportation, communication, utilities	7%	9%	
Total expenditures, 1996 (millions)	\$157,448	\$1,368,858	1	wholesale and retail trade	16%	16%	
R&D obligations, 1995 (millions)	\$12,704	\$67,080	1	finance, insurance, real estate services	23%	19%	
				government	22%	20%	
					12%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in California by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	12,703,572	1,843,729	2,114,606	6,685,458	1,666,792	361,960	31,027	1
Department of Agriculture	76,788	55,432	0	0	21,039	317	0	3
Department of Commerce	86,514	14,161	75	62,180	9,335	541	222	2
Department of Defense	7,272,250	1,424,282	197,851	5,352,911	255,735	41,471	0	1
Department of Energy	1,058,345	5,147	849,410	107,416	80,485	6,184	9,703	2
Dept. of Health & Human Services	1,305,366	4,274	32,631	119,258	869,400	275,580	4,223	2
Department of the Interior	45,125	40,680	160	1,139	2,826	320	0	3
Department of Transportation	33,854	8,096	277	6,737	3,149	1,500	14,095	6
Environmental Protection Agency	25,367	0	0	8,399	13,690	742	2,536	6
Nat'l Aeronautics & Space Admin.	2,503,332	291,360	1,033,819	998,238	158,817	20,850	248	1
National Science Foundation	296,631	297	383	29,180	252,316	14,455	0	1
State rank	1	3	1	1	1	2	2	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

COLORADO

Science and Engineering Profile

	CO	U.S.	Rank		CO	U.S.	Rank
Doctoral scientists, 1995	9,261	453,928	17	Total R&D performance, 1995 (millions)	\$2,603	\$177,210	20
Doctoral engineers, 1995	1,945	86,738	13	Industry R&D, 1995 (millions)	\$1,865	\$130,332	17
S&E doctorates awarded, 1996	545	27,230	17	Academic R&D, 1995 (millions)	\$394	\$21,606	18
of which, in engineering	28%	23%		of which, in life sciences	47%	55%	
in life sciences	20%	25%		in engineering	15%	16%	
in physical sciences	16%	14%		in environmental sciences	14%	6%	
S&E postdoctorates, 1995	861	35,379	13	Higher education current-fund expenditures, 1995 (millions)	\$2,205	\$182,602	26
in doctorate-granting institutions							
S&E graduate students, 1996	8,932	436,328	17	Number of SBIR awards, 1990-1996	990	26,399	6
in doctorate-granting institutions				Patents issued to state residents, 1996	1,178	61,099	16
Population, 1996 (000s)	3,823	269,067	25	Gross state product, 1994 (billions)	\$99.8	\$6,876.0	23
Civilian labor force, 1996 (000s)	2,102	135,528	22	of which, agriculture	2%	2%	
Personal income per capita, 1996	\$25,084	\$24,231	14	manufacturing, mining, construction	19%	23%	
Federal spending				transportation, communication, utilities	11%	9%	
Total expenditures, 1996 (millions)	\$20,009	\$1,368,858	23	wholesale and retail trade	16%	16%	
R&D obligations, 1995 (millions)	\$965	\$67,080	18	finance, insurance, real estate services	17%	19%	
				government	21%	20%	
					14%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Colorado by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	965,060	167,869	84,226	434,627	227,195	46,418	4,725	18
Department of Agriculture	30,093	22,319	0	0	7,774	0	0	17
Department of Commerce	76,164	69,884	0	2,080	4,200	0	0	3
Department of Defense	372,513	20,579	462	329,949	21,513	10	0	19
Department of Energy	39,115	3,142	4,743	20,279	9,721	1,230	0	19
Dept. of Health & Human Services	151,008	0	0	4,259	115,574	27,771	3,404	19
Department of the Interior	45,647	43,378	0	186	1,984	0	99	2
Department of Transportation	7,702	460	0	1,392	0	4,740	1,110	20
Environmental Protection Agency	6,364	0	0	2,161	2,366	1,837	0	19
Nat'l Aeronautics & Space Admin.	115,796	6,542	7,449	71,161	20,937	9,707	0	11
National Science Foundation	120,658	1,565	71,572	3,160	43,126	1,123	112	4
State rank	18	18	11	16	17	13	15	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

CONNECTICUT

Science and Engineering Profile

	CT	U.S.	Rank		CT	U.S.	Rank
Doctoral scientists, 1995	7,643	453,928	20	Total R&D performance, 1995 (millions)	\$4,311	\$177,210	13
Doctoral engineers, 1995	1,151	86,738	24	Industry R&D, 1995 (millions)	\$3,906	\$130,332	12
S&E doctorates awarded, 1996	391	27,230	23	Academic R&D, 1995 (millions)	\$377	\$21,606	20
of which, in life sciences	31%	25%		of which, in life sciences	70%	55%	
in social sciences	20%	15%		in engineering	11%	16%	
in engineering	14%	23%		in physical sciences	7%	10%	
S&E postdoctorates, 1995	1,130	35,379	8	Higher education current-fund expenditures, 1995 (millions)	\$2,743	\$182,602	23
in doctorate-granting institutions				Number of SBIR awards, 1990-1996	851	26,399	9
S&E graduate students, 1995	5,017	436,328	28	Patents issued to state residents, 1996	1,452	61,099	12
in doctorate-granting institutions							
Population, 1996 (000s)	3,274	269,067	29	Gross state product, 1994 (billions)	\$110.4	\$6,876.0	21
Civilian labor force, 1996 (000s)	1,720	135,528	28	of which, agriculture	1%	2%	
Personal income per capita, 1996	\$33,189	\$24,231	2	manufacturing, mining, construction	20%	23%	
Federal spending				transportation, communication, utilities	7%	9%	
Total expenditures, 1996 (millions)	\$17,915	\$1,368,858	28	wholesale and retail trade	15%	16%	
R&D obligations, 1995 (millions)	\$902	\$67,080	20	finance, insurance, real estate services	27%	19%	
				government	21%	20%	
					9%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Connecticut by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	902,334	17,690	0	635,941	234,126	9,737	4,840	20
Department of Agriculture	5,470	1,985	0	0	2,277	0	1,208	48
Department of Commerce	7,806	39	0	4,315	3,399	0	53	25
Department of Defense	558,660	6,306	0	539,273	13,081	0	0	17
Department of Energy	62,991	0	0	52,992	9,999	0	0	16
Dept. of Health & Human Services	200,739	0	0	4,665	185,648	8,873	1,553	16
Department of the Interior	1,275	1,159	0	38	78	0	0	51
Department of Transportation	13,723	8,201	0	3,611	54	0	1,857	13
Environmental Protection Agency	1,372	0	0	1,094	113	100	65	32
Nat'l Aeronautics & Space Admin.	29,586	0	0	27,457	1,788	341	0	19
National Science Foundation	20,712	0	0	2,496	17,689	423	104	25
State rank	20	44	na	13	14	25	13	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

DISTRICT OF COLUMBIA

Science and Engineering Profile

	DC	U.S.	Rank		DC	U.S.	Rank
Doctoral scientists, 1995	12,746	453,928	11	Total R&D performance, 1995 (millions)	\$3,128	\$177,210	18
Doctoral engineers, 1995	1,055	86,738	25	Industry R&D, 1995 (millions)	\$672	\$130,332	32
S&E doctorates awarded, 1996	304	27,230	26	Academic R&D, 1995 (millions)	\$181	\$21,606	32
of which, in social sciences	34%	15%		of which, in life sciences	67%	55%	
in life sciences	21%	25%		in physical sciences	10%	10%	
in psychology	15%	13%		in engineering	9%	16%	
S&E postdoctorates, 1995	148	35,379	35	Higher education current-fund expenditures, 1995 (millions)	\$2,633	\$182,602	24
in doctorate-granting institutions							
S&E graduate students, 1995	9,521	436,328	14	Number of SBIR awards, 1990-1996	71	26,399	34
in doctorate-granting institutions				Patents issued to state residents, 1996	40	61,099	49
Population, 1996 (000s)	543	269,067	51	Gross state product, 1994 (billions)	\$48.0	\$6,876.0	34
Civilian labor force, 1996 (000s)	272	135,528	51	of which, agriculture	0%	2%	
Personal income per capita, 1996	\$34,932	\$24,231	1	manufacturing, mining, construction	4%	23%	
Federal spending				transportation, communication, utilities	5%	9%	
Total expenditures, 1996 (millions)	\$22,475	\$1,368,858	20	wholesale and retail trade	4%	16%	
R&D obligations, 1995 (millions)	\$2,805	\$67,080	7	finance, insurance, real estate	14%	19%	
				services	33%	20%	
				government	40%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in District of Columbia by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	2,805,093	2,106,077	0	381,390	147,605	168,518	1,503	7
Department of Agriculture	142,064	133,228	0	8,052	611	173	0	1
Department of Commerce	27,486	26,345	0	145	891	105	0	12
Department of Defense	1,396,543	1,132,832	0	207,890	43,070	12,751	0	7
Department of Energy	349,156	300,628	0	38,062	4,144	6,322	0	6
Dept. of Health & Human Services	221,291	95,802	0	14,281	71,805	39,194	209	14
Department of the Interior	14,869	14,566	0	13	119	171	0	8
Department of Transportation	177,455	91,279	0	63,983	5,380	15,554	1,259	1
Environmental Protection Agency	60,381	45,398	0	2,178	492	12,313	0	2
Nat'l Aeronautics & Space Admin.	341,121	259,276	0	42,904	8,258	30,648	35	8
National Science Foundation	74,727	6,723	0	3,882	12,835	51,287	0	8
State rank	7	2	na	17	25	5	41	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

DELAWARE

Science and Engineering Profile

	DE	U.S.	Rank		DE	U.S.	Rank
Doctoral scientists, 1995	3,197	453,928	35	Total R&D performance, 1995 (millions)	\$1,149	\$177,210	28
Doctoral engineers, 1995	707	86,738	32	Industry R&D, 1995 (millions)	\$1,077	\$130,332	23
S&E doctorates awarded, 1996	136	27,230	38	Academic R&D, 1995 (millions)	\$53	\$21,606	47
of which, in engineering	32%	23%		of which, in engineering	28%	16%	
in physical sciences	16%	14%		in life sciences	22%	55%	
in life sciences	13%	25%		in physical sciences	20%	10%	
S&E postdoctorates, 1995	69	35,379	42	Higher education current-fund expenditures, 1995 (millions)	\$502	\$182,602	46
in doctorate-granting institutions							
S&E graduate students, 1995	1,722	436,328	41	Number of SBIR awards, 1990-1996	91	26,399	30
in doctorate-granting institutions				Patents issued to state residents, 1996	454	61,099	28
Population, 1996 (000s)	725	269,067	47	Gross state product, 1994 (billions)	\$26.7	\$6,876.0	43
Civilian labor force, 1996 (000s)	382	135,528	47	of which, agriculture	1%	2%	
Personal income per capita, 1996	\$27,622	\$24,231	6	manufacturing, mining, construction	24%	23%	
Federal spending				transportation, communication, utilities	5%	9%	
Total expenditures, 1996 (millions)	\$3,364	\$1,368,858	50	wholesale and retail trade	10%	16%	
R&D obligations, 1995 (millions)	\$56	\$67,080	46	finance, insurance, real estate	39%	19%	
				services	13%	20%	
				government	9%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Delaware by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	56,381	15,477	0	15,449	21,934	2,994	527	46
Department of Agriculture	4,084	996	0	50	3,038	0	0	50
Department of Commerce	8,240	1,155	0	5,857	1,188	0	40	24
Department of Defense	21,175	10,023	0	6,462	4,690	0	0	38
Department of Energy	1,562	0	0	109	1,048	405	0	46
Dept. of Health & Human Services	4,869	0	0	483	3,595	704	87	47
Department of the Interior	769	643	0	0	116	0	10	52
Department of Transportation	4,222	2,660	0	1,072	100	0	390	27
Environmental Protection Agency	522	0	0	0	522	0	0	42
Nat'l Aeronautics & Space Admin.	2,358	0	0	1,026	480	852	0	40
National Science Foundation	8,580	0	0	390	7,157	1,033	0	40
State rank	46	45	na	39	46	38	52	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

FLORIDA

Science and Engineering Profile

	FL	U.S.	Rank		FL	U.S.	Rank
Doctoral scientists, 1995	12,403	453,928	14	Total R&D performance, 1995 (millions)	\$5,223	\$177,210	12
Doctoral engineers, 1995	2,633	86,738	12	Industry R&D, 1995 (millions)	\$4,101	\$130,332	10
S&E doctorates awarded, 1996	762	27,230	9	Academic R&D, 1995 (millions)	\$559	\$21,606	12
of which, in engineering	24%	23%		of which, in life sciences	48%	55%	
in life sciences	21%	25%		in engineering	16%	16%	
in psychology	19%	13%		in physical sciences	15%	10%	
S&E postdoctorates, 1995	543	35,379	21	Higher education current-fund expenditures, 1995 (millions)	\$5,222	\$182,602	10
in doctorate-granting institutions							
S&E graduate students, 1995	16,531	436,328	9	Number of SBIR awards, 1990-1996	558	26,399	13
in doctorate-granting institutions				Patents issued to state residents, 1996	2,082	61,099	10
Population, 1996 (000s)	14,400	269,067	4	Gross state product, 1994 (billions)	\$317.8	\$6,876.0	5
Civilian labor force, 1996 (000s)	6,938	135,528	4	of which, agriculture	2%	2%	
Personal income per capita, 1996	\$24,104	\$24,231	21	manufacturing, mining, construction	13%	23%	
Federal spending				transportation, communication, utilities	9%	9%	
Total expenditures, 1996 (millions)	\$79,167	\$1,368,858	4	wholesale and retail trade	18%	16%	
R&D obligations, 1995 (millions)	\$2,404	\$67,080	10	finance, insurance, real estate	21%	19%	
				services	23%	20%	
				government	13%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Florida by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	2,403,899	554,440	0	1,573,440	262,972	8,165	4,882	10
Department of Agriculture	33,691	21,115	0	80	12,461	35	0	13
Department of Commerce	29,084	23,323	0	1,938	3,682	20	121	11
Department of Defense	1,744,366	294,493	0	1,404,755	45,118	0	0	6
Department of Energy	21,046	0	0	9,542	10,827	677	0	25
Dept. of Health & Human Services	127,429	0	0	6,129	116,198	3,933	1,169	23
Department of the Interior	14,195	10,944	0	69	3,124	0	58	9
Department of Transportation	5,280	375	0	1,149	955	0	2,801	25
Environmental Protection Agency	18,670	7,823	0	8,583	2,122	0	142	9
Nat'l Aeronautics & Space Admin.	356,445	196,367	0	140,980	17,734	773	591	7
National Science Foundation	53,693	0	0	215	50,751	2,727	0	13
State rank	10	7	na	5	12	27	12	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

GEORGIA

Science and Engineering Profile

	GA	U.S.	Rank		GA	U.S.	Rank
Doctoral scientists, 1995	9,300	453,928	16	Total R&D performance, 1995 (millions)	\$2,113	\$177,210	23
Doctoral engineers, 1995	1,154	86,738	23	Industry R&D, 1995 (millions)	\$1,175	\$130,332	22
S&E doctorates awarded, 1996	599	27,230	15	Academic R&D, 1995 (millions)	\$658	\$21,606	10
of which, in engineering	29%	23%		of which, in life sciences	51%	55%	
in life sciences	27%	25%		in engineering	25%	16%	
in psychology	15%	13%		in physical sciences	8%	10%	
S&E postdoctorates, 1995	516	35,379	22	Higher education current-fund expenditures, 1995 (millions)	\$4,527	\$182,602	11
in doctorate-granting institutions							
S&E graduate students, 1995	9,044	436,328	15	Number of SBIR awards, 1990-1996	187	26,399	26
in doctorate-granting institutions				Patents issued to state residents, 1996	967	61,099	20
Population, 1996 (000s)	7,353	269,067	10	Gross state product, 1994 (billions)	\$183.0	\$6,876.0	11
Civilian labor force, 1996 (000s)	3,753	135,528	11	of which, agriculture	2%	2%	
Personal income per capita, 1996	\$22,709	\$24,231	27	manufacturing, mining, construction	22%	23%	
Federal spending				transportation, communication, utilities	12%	9%	
Total expenditures, 1996 (millions)	\$34,731	\$1,368,858	14	wholesale and retail trade	18%	16%	
R&D obligations, 1995 (millions)	\$4,366	\$67,080	3	finance, insurance, real estate	16%	19%	
				services	17%	20%	
				government	13%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Georgia by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	4,365,770	272,178	0	3,849,787	232,133	7,766	3,906	3
Department of Agriculture	51,341	38,047	0	0	13,043	0	251	5
Department of Commerce	2,280	362	0	1,208	700	0	10	33
Department of Defense	3,900,416	18,924	0	3,832,613	47,072	1,807	0	2
Department of Energy	15,294	0	0	1,039	13,669	586	0	29
Dept. of Health & Human Services	306,242	190,976	0	815	111,227	2,859	365	10
Department of the Interior	6,221	5,871	0	0	350	0	0	21
Department of Transportation	7,302	613	0	1,707	1,061	1,687	2,234	21
Environmental Protection Agency	18,054	9,014	0	3,697	5,333	10	0	10
Nat'l Aeronautics & Space Admin.	31,110	8,371	0	6,893	15,085	761	0	18
National Science Foundation	27,510	0	0	1,815	24,593	56	1,046	22
State rank	3	13	na	2	16	28	18	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

HAWAII

Science and Engineering Profile

	HI	U.S.	Rank		HI	U.S.	Rank
Doctoral scientists, 1995	2,293	453,928	38	Total R&D performance, 1995 (millions)	\$509	\$177,210	38
Doctoral engineers, 1995	202	86,738	46	Industry R&D, 1995 (millions)	\$14	\$130,332	50
S&E doctorates awarded, 1996	129	27,230	39	Academic R&D, 1995 (millions)	\$78	\$21,606	41
of which, in social sciences	40%	15%		of which, in life sciences	41%	55%	
in life sciences	29%	25%		in physical sciences	34%	10%	
in environmental sciences	12%	3%		in environmental sciences	10%	6%	
S&E postdoctorates, 1995	91	35,379	37	Higher education current-fund expenditures, 1995 (millions)	\$754	\$182,602	42
in doctorate-granting institutions							
S&E graduate students, 1995	2,254	436,328	38	Number of SBIR awards, 1990-1996	95	26,399	29
in doctorate-granting institutions				Patents issued to state residents, 1996	80	61,099	46
Population, 1996 (000s)	1,184	269,067	42	Gross state product, 1994 (billions)	\$36.7	\$6,876.0	40
Civilian labor force, 1996 (000s)	591	135,528	43	of which, agriculture	1%	2%	
Personal income per capita, 1996	\$25,159	\$24,231	12	manufacturing, mining, construction	9%	23%	
Federal spending				transportation, communication, utilities	9%	9%	
Total expenditures, 1996 (millions)	\$8,016	\$1,368,858	39	wholesale and retail trade	15%	16%	
R&D obligations, 1995 (millions)	\$480	\$67,080	26	finance, insurance, real estate	23%	19%	
				services	21%	20%	
				government	21%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Hawaii by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	480,428	401,963	0	11,179	51,060	14,520	1,706	26
Department of Agriculture	20,296	9,987	0	0	4,941	5,368	0	23
Department of Commerce	11,085	7,599	0	237	3,121	0	128	22
Department of Defense	48,940	33,676	0	9,560	4,889	10	805	30
Department of Energy	6,074	0	0	0	3,106	2,968	0	36
Dept. of Health & Human Services	360,789	340,000	0	606	14,532	5,560	91	8
Department of the Interior	10,797	10,651	0	0	100	0	46	13
Department of Transportation	636	0	0	0	0	0	636	49
Environmental Protection Agency	246	0	0	0	171	75	0	46
Nat'l Aeronautics & Space Admin.	7,424	50	0	659	6,715	0	0	32
National Science Foundation	14,141	0	0	117	13,485	539	0	30
State rank	26	10	na	42	37	22	38	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

IOWA

Science and Engineering Profile

	IA	U.S.	Rank		IA	U.S.	Rank
Doctoral scientists, 1995	4,071	453,928	30	Total R&D performance, 1995 (millions)	\$1,391	\$177,210	27
Doctoral engineers, 1995	604	86,738	33	Industry R&D, 1995 (millions)	\$998	\$130,332	26
S&E doctorates awarded, 1996	457	27,230	20	Academic R&D, 1995 (millions)	\$323	\$21,606	24
of which, in life sciences	34%	25%		of which, in life sciences	60%	55%	
in engineering	26%	23%		in engineering	21%	16%	
in physical sciences	14%	14%		in physical sciences	8%	10%	
S&E postdoctorates, 1995	551	35,379	20	Higher education current-fund expenditures, 1995 (millions)	\$2,753	\$182,602	22
in doctorate-granting institutions							
S&E graduate students, 1995	5,452	436,328	27	Number of SBIR awards, 1990-1996	40	26,399	41
in doctorate-granting institutions				Patents issued to state residents, 1996	432	61,099	29
Population, 1996 (000s)	2,852	269,067	31	Gross state product, 1994 (billions)	\$68.3	\$6,876.0	29
Civilian labor force, 1996 (000s)	1,599	135,528	29	of which, agriculture	7%	2%	
Personal income per capita, 1996	\$22,560	\$24,231	29	manufacturing, mining, construction	29%	23%	
Federal spending				transportation, communication, utilities	8%	9%	
Total expenditures, 1996 (millions)	\$13,408	\$1,368,858	32	wholesale and retail trade	16%	16%	
R&D obligations, 1995 (millions)	\$214	\$67,080	33	finance, insurance, real estate services	14%	19%	
				government	15%	20%	
					12%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Iowa by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	214,316	37,257	29,815	12,623	130,285	1,054	3,282	33
Department of Agriculture	39,159	25,737	0	0	13,422	0	0	9
Department of Commerce	1,343	0	0	17	1,326	0	0	36
Department of Defense	21,335	1,079	30	10,796	9,421	9	0	37
Department of Energy	28,913	0	25,930	0	2,983	0	0	23
Dept. of Health & Human Services	82,815	0	0	100	80,327	995	1,393	28
Department of the Interior	2,526	2,438	0	0	88	0	0	42
Department of Transportation	15,988	8,003	3,855	62	2,755	0	1,313	10
Environmental Protection Agency	2,766	0	0	0	2,140	50	576	26
Nat'l Aeronautics & Space Admin.	7,197	0	0	1,548	5,649	0	0	34
National Science Foundation	12,274	0	0	100	12,174	0	0	33
State rank	33	35	14	41	27	46	24	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

IDAHO

Science and Engineering Profile

	ID	U.S.	Rank		ID	U.S.	Rank
Doctoral scientists, 1995	1,649	453,928	45	Total R&D performance, 1995 (millions)	\$914	\$177,210	32
Doctoral engineers, 1995	382	86,738	40	Industry R&D, 1995 (millions)	\$827	\$130,332	27
S&E doctorates awarded, 1996	56	27,230	43	Academic R&D, 1995 (millions)	\$59	\$21,606	45
of which, in engineering	30%	23%		of which, in life sciences	73%	55%	
in life sciences	29%	25%		in engineering	14%	16%	
in physical sciences	23%	14%		in physical sciences	5%	10%	
S&E postdoctorates, 1995	44	35,379	46	Higher education current-fund expenditures, 1995 (millions)	\$572	\$182,602	45
in doctorate-granting institutions							
S&E graduate students, 1995	1,688	436,328	42	Number of SBIR awards, 1990-1996	34	26,399	43
in doctorate-granting institutions				Patents issued to state residents, 1996	365	61,099	32
Population, 1996 (000s)	1,189	269,067	41	Gross state product, 1994 (billions)	\$24.2	\$6,876.0	45
Civilian labor force, 1996 (000s)	619	135,528	42	of which, agriculture	6%	2%	
Personal income per capita, 1996	\$19,539	\$24,231	44	manufacturing, mining, construction	26%	23%	
Federal spending				transportation, communication, utilities	9%	9%	
Total expenditures, 1996 (millions)	\$5,476	\$1,368,858	44	wholesale and retail trade	16%	16%	
R&D obligations, 1995 (millions)	\$211	\$67,080	36	finance, insurance, real estate services	13%	19%	
				government	16%	20%	
					14%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Idaho by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	211,063	27,792	65,810	101,893	13,536	548	1,484	36
Department of Agriculture	18,429	13,304	0	0	5,090	35	0	27
Department of Commerce	476	476	0	0	0	0	0	40
Department of Defense	12,889	3,659	1,546	6,221	1,463	0	0	42
Department of Energy	161,093	1,080	63,753	95,417	253	20	570	10
Dept. of Health & Human Services	1,806	0	0	0	1,068	493	245	51
Department of the Interior	9,687	8,805	0	40	842	0	0	15
Department of Transportation	1,330	0	511	150	0	0	669	42
Environmental Protection Agency	769	0	0	0	769	0	0	39
Nat'l Aeronautics & Space Admin.	724	468	0	0	256	0	0	49
National Science Foundation	3,860	0	0	65	3,795	0	0	48
State rank	36	41	12	27	50	51	42	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

ILLINOIS

Science and Engineering Profile

	IL	U.S.	Rank		IL	U.S.	Rank
Doctoral scientists, 1995	18,868	453,928	7	Total R&D performance, 1995 (millions)	\$7,487	\$177,210	7
Doctoral engineers, 1995	3,204	86,738	9	Industry R&D, 1995 (millions)	\$5,776	\$130,332	7
S&E doctorates awarded, 1996	1,476	27,230	5	Academic R&D, 1995 (millions)	\$818	\$21,606	7
of which, in engineering	22%	23%		of which, in life sciences	52%	55%	
in life sciences	21%	25%		in engineering	12%	16%	
in social sciences	20%	15%		in physical sciences	11%	10%	
S&E postdoctorates, 1995	1,070	35,379	9	Higher education current-fund expenditures, 1995 (millions)	\$9,397	\$182,602	5
in doctorate-granting institutions							
S&E graduate students, 1995	21,181	436,328	6	Number of SBIR awards, 1990-1996	390	26,399	19
in doctorate-granting institutions				Patents issued to state residents, 1996	3,144	61,099	5
Population, 1996 (000s)	11,847	269,067	6	Gross state product, 1994 (billions)	\$332.9	\$6,876.0	4
Civilian labor force, 1996 (000s)	6,100	135,528	5	of which, agriculture	1%	2%	
Personal income per capita, 1996	\$26,598	\$24,231	8	manufacturing, mining, construction	23%	23%	
Federal spending				transportation, communication, utilities	10%	9%	
Total expenditures, 1996 (millions)	\$51,232	\$1,368,858	6	wholesale and retail trade	16%	16%	
R&D obligations, 1995 (millions)	\$1,116	\$67,080	17	finance, insurance, real estate services	19%	19%	
				government	20%	20%	
					10%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Illinois by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	1,116,137	80,626	421,040	133,876	434,009	41,416	5,170	17
Department of Agriculture	43,469	31,311	0	240	11,904	14	0	7
Department of Commerce	19,638	540	4	17,652	1,442	0	0	14
Department of Defense	147,523	44,144	2,922	42,955	56,284	1,218	0	25
Department of Energy	499,033	0	417,794	56,875	21,481	2,454	429	4
Dept. of Health & Human Services	266,000	1,945	0	5,126	224,107	34,015	807	12
Department of the Interior	2,291	2,019	80	57	82	0	53	44
Department of Transportation	12,212	0	0	4,324	4,207	300	3,381	14
Environmental Protection Agency	3,941	0	0	1,737	1,344	360	500	24
Nat'l Aeronautics & Space Admin.	17,507	667	240	3,787	11,809	1,004	0	24
National Science Foundation	104,523	0	0	1,123	101,349	2,051	0	6
State rank	17	25	3	25	8	15	11	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

INDIANA

Science and Engineering Profile

	IN	U.S.	Rank		IN	U.S.	Rank
Doctoral scientists, 1995	7,156	453,928	22	Total R&D performance, 1995 (millions)	\$3,163	\$177,210	17
Doctoral engineers, 1995	1,441	86,738	18	Industry R&D, 1995 (millions)	\$2,721	\$130,332	13
S&E doctorates awarded, 1996	750	27,230	10	Academic R&D, 1995 (millions)	\$376	\$21,606	21
of which, in engineering	25%	23%		of which, in life sciences	50%	55%	
in life sciences	22%	25%		in engineering	18%	16%	
in physical sciences	16%	14%		in physical sciences	16%	10%	
S&E postdoctorates, 1995	602	35,379	18	Higher education current-fund expenditures, 1995 (millions)	\$4,041	\$182,602	14
in doctorate-granting institutions							
S&E graduate students, 1995	10,140	436,328	12	Number of SBIR awards, 1990-1996	119	26,399	27
in doctorate-granting institutions				Patents issued to state residents, 1996	1,277	61,099	14
Population, 1996 (000s)	5,841	269,067	14	Gross state product, 1994 (billions)	\$138.2	\$6,876.0	15
Civilian labor force, 1996 (000s)	3,072	135,528	14	of which, agriculture	2%	2%	
Personal income per capita, 1996	\$22,440	\$24,231	30	manufacturing, mining, construction	36%	23%	
Federal spending				transportation, communication, utilities	8%	9%	
Total expenditures, 1996 (millions)	\$24,216	\$1,368,858	18	wholesale and retail trade	15%	16%	
R&D obligations, 1995 (millions)	\$426	\$67,080	27	finance, insurance, real estate	13%	19%	
				services	15%	20%	
				government	10%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Indiana by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	426,192	62,061	0	183,529	173,978	3,596	3,028	27
Department of Agriculture	16,342	4,902	0	80	11,090	110	160	29
Department of Commerce	1,061	105	0	535	409	12	0	38
Department of Defense	229,504	53,105	0	158,806	14,622	2,971	0	22
Department of Energy	21,849	0	0	6,260	15,589	0	0	24
Dept. of Health & Human Services	91,482	150	0	3,085	86,535	367	1,345	26
Department of the Interior	2,670	2,579	0	0	91	0	0	41
Department of Transportation	8,218	0	0	6,716	0	0	1,502	19
Environmental Protection Agency	2,631	0	0	2,115	495	0	21	27
Nat'l Aeronautics & Space Admin.	11,447	1,220	0	5,460	4,631	136	0	28
National Science Foundation	40,988	0	0	472	40,516	0	0	17
State rank	27	27	na	22	22	35	27	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

KANSAS

Science and Engineering Profile

	KS	U.S.	Rank		KS	U.S.	Rank
Doctoral scientists, 1995	3,510	453,928	34	Total R&D performance, 1995 (millions)	\$764	\$177,210	34
Doctoral engineers, 1995	516	86,738	34	Industry R&D, 1995 (millions)	\$569	\$130,332	33
S&E doctorates awarded, 1996	284	27,230	30	Academic R&D, 1995 (millions)	\$181	\$21,606	32
of which, in life sciences	30%	25%		of which, in life sciences	59%	55%	
in psychology	20%	13%		in engineering	15%	16%	
in engineering	17%	23%		in physical sciences	9%	10%	
S&E postdoctorates, 1995	268	35,379	29	Higher education current-fund expenditures, 1995 (millions)	\$1,676	\$182,602	32
in doctorate-granting institutions							
S&E graduate students, 1995	6,013	436,328	25	Number of SBIR awards, 1990-1996	50	26,399	38
in doctorate-granting institutions				Patents issued to state residents, 1996	291	61,099	34
Population, 1996 (000s)	2,572	269,067	33	Gross state product, 1994 (billions)	\$61.8	\$6,876.0	31
Civilian labor force, 1996 (000s)	1,340	135,528	31	of which, agriculture	5%	2%	
Personal income per capita, 1996	\$23,281	\$24,231	23	manufacturing, mining, construction	23%	23%	
Federal spending				transportation, communication, utilities	12%	9%	
Total expenditures, 1996 (millions)	\$12,347	\$1,368,858	33	wholesale and retail trade	17%	16%	
R&D obligations, 1995 (millions)	\$121	\$67,080	40	finance, insurance, real estate	13%	19%	
				services	16%	20%	
				government	15%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Kansas by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	120,846	12,296	0	42,764	62,934	910	1,942	40
Department of Agriculture	12,981	6,181	0	80	6,720	0	0	36
Department of Commerce	173	173	0	0	0	0	0	44
Department of Defense	43,422	2,658	0	39,409	1,355	0	0	31
Department of Energy	6,164	0	0	378	5,774	12	0	35
Dept. of Health & Human Services	34,479	0	0	1,558	31,195	898	828	37
Department of the Interior	3,362	3,284	0	0	78	0	0	37
Department of Transportation	1,514	0	0	0	400	0	1,114	37
Environmental Protection Agency	4,970	0	0	0	4,970	0	0	21
Nat'l Aeronautics & Space Admin.	3,512	0	0	1,208	2,304	0	0	38
National Science Foundation	10,269	0	0	131	10,138	0	0	36
State rank	40	47	na	32	32	48	37	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

KENTUCKY

Science and Engineering Profile

	KY	U.S.	Rank		KY	U.S.	Rank
Doctoral scientists, 1995	3,855	453,928	33	Total R&D performance, 1995 (millions)	\$594	\$177,210	36
Doctoral engineers, 1995	432	86,738	37	Industry R&D, 1995 (millions)	\$452	\$130,332	36
S&E doctorates awarded, 1996	197	27,230	33	Academic R&D, 1995 (millions)	\$135	\$21,606	35
of which, in life sciences	35%	25%		of which, in life sciences	73%	55%	
in psychology	21%	13%		in engineering	15%	16%	
in engineering	15%	23%		in physical sciences	4%	10%	
S&E postdoctorates, 1995	236	35,379	31	Higher education current-fund expenditures, 1995 (millions)	\$2,012	\$182,602	29
in doctorate-granting institutions							
S&E graduate students, 1995	3,615	436,328	33	Number of SBIR awards, 1990-1996	43	26,399	40
in doctorate-granting institutions				Patents issued to state residents, 1996	319	61,099	33
Population, 1996 (000s)	3,884	269,067	24	Gross state product, 1994 (billions)	\$86.5	\$6,876.0	26
Civilian labor force, 1996 (000s)	1,867	135,528	25	of which, agriculture	3%	2%	
Personal income per capita, 1996	\$19,687	\$24,231	43	manufacturing, mining, construction	34%	23%	
Federal spending				transportation, communication, utilities	10%	9%	
Total expenditures, 1996 (millions)	\$19,618	\$1,368,858	25	wholesale and retail trade	14%	16%	
R&D obligations, 1995 (millions)	\$76	\$67,080	44	finance, insurance, real estate services	11%	19%	
				government	14%	20%	
					14%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Kentucky by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	75,670	5,911	0	5,008	61,993	1,102	1,656	44
Department of Agriculture	8,725	0	0	0	8,725	0	0	40
Department of Commerce	71	0	0	1	70	0	0	47
Department of Defense	10,846	4,053	0	4,061	2,732	0	0	43
Department of Energy	5,617	0	0	120	5,477	0	20	39
Dept. of Health & Human Services	36,486	0	0	806	34,073	1,102	505	34
Department of the Interior	1,895	1,817	0	0	78	0	0	46
Department of Transportation	1,419	0	0	6	282	0	1,131	40
Environmental Protection Agency	1,221	0	0	0	1,221	0	0	36
Nat'l Aeronautics & Space Admin.	1,386	41	0	0	1,345	0	0	46
National Science Foundation	8,004	0	0	14	7,990	0	0	41
State rank	44	50	na	46	34	45	39	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

LOUISIANA

Science and Engineering Profile

	LA	U.S.	Rank		LA	U.S.	Rank
Doctoral scientists, 1995	4,926	453,928	27	Total R&D performance, 1995 (millions)	\$423	\$177,210	41
Doctoral engineers, 1995	787	86,738	30	Industry R&D, 1995 (millions)	\$61	\$130,332	45
S&E doctorates awarded, 1996	285	27,230	29	Academic R&D, 1995 (millions)	\$315	\$21,606	25
of which, in life sciences	36%	25%		of which, in life sciences	64%	55%	
in social sciences	15%	15%		in engineering	14%	16%	
in math & computer sciences	13%	8%		in environmental sciences	7%	6%	
S&E postdoctorates, 1995	290	35,379	27	Higher education current-fund expenditures, 1995 (millions)	\$2,534	\$182,602	25
in doctorate-granting institutions							
S&E graduate students, 1995	6,248	436,328	23	Number of SBIR awards, 1990-1996	77	26,399	32
in doctorate-granting institutions				Patents issued to state residents, 1996	400	61,099	31
Population, 1996 (000s)	4,351	269,067	22	Gross state product, 1994 (billions)	\$101.1	\$6,876.0	22
Civilian labor force, 1996 (000s)	1,997	135,528	24	of which, agriculture	1%	2%	
Personal income per capita, 1996	\$19,824	\$24,231	41	manufacturing, mining, construction	32%	23%	
Federal spending				transportation, communication, utilities	11%	9%	
Total expenditures, 1996 (millions)	\$22,118	\$1,368,858	21	wholesale and retail trade	14%	16%	
R&D obligations, 1995 (millions)	\$176	\$67,080	38	finance, insurance, real estate services	13%	19%	
				government	17%	20%	
					12%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Louisiana by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	176,253	45,108	0	22,035	103,764	1,863	3,483	38
Department of Agriculture	33,149	25,349	0	0	7,760	40	0	14
Department of Commerce	2,910	902	0	687	1,204	0	117	31
Department of Defense	38,354	3,377	0	16,632	18,335	10	0	33
Department of Energy	11,514	175	0	3,963	7,376	0	0	32
Dept. of Health & Human Services	54,438	2,213	0	215	49,753	1,813	444	32
Department of the Interior	15,235	13,090	0	0	2,093	0	52	6
Department of Transportation	1,551	0	0	0	226	0	1,325	36
Environmental Protection Agency	5,868	0	0	149	5,719	0	0	20
Nat'l Aeronautics & Space Admin.	3,738	2	0	304	3,432	0	0	37
National Science Foundation	9,496	0	0	85	7,866	0	1,545	37
State rank	38	32	na	38	29	40	22	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

MASSACHUSETTS

Science and Engineering Profile

	MA	U.S.	Rank		MA	U.S.	Rank
Doctoral scientists, 1995	20,731	453,928	5	Total R&D performance, 1995 (millions)	\$9,969	\$177,210	4
Doctoral engineers, 1995	3,583	86,738	7	Industry R&D, 1995 (millions)	\$7,416	\$130,332	5
S&E doctorates awarded, 1996	1,575	27,230	4	Academic R&D, 1995 (millions)	\$1,147	\$21,606	5
of which, in engineering	24%	23%		of which, in life sciences	40%	55%	
in life sciences	24%	25%		in engineering	20%	16%	
in social sciences	18%	15%		in physical sciences	16%	10%	
S&E postdoctorates, 1995	3,185	35,379	2	Higher education current-fund expenditures, 1995 (millions)	\$7,974	\$182,602	6
in doctorate-granting institutions							
S&E graduate students, 1995	23,083	436,328	4	Number of SBIR awards, 1990-1996	4,177	26,399	2
in doctorate-granting institutions				Patents issued to state residents, 1996	2,452	61,099	9
Population, 1996 (000s)	6,092	269,067	13	Gross state product, 1994 (billions)	\$186.2	\$6,876.0	10
Civilian labor force, 1996 (000s)	3,189	135,528	13	of which, agriculture	1%	2%	
Personal income per capita, 1996	\$29,439	\$24,231	4	manufacturing, mining, construction	20%	23%	
Federal spending				transportation, communication, utilities	7%	9%	
Total expenditures, 1996 (millions)	\$36,457	\$1,368,858	12	wholesale and retail trade	15%	16%	
R&D obligations, 1995 (millions)	\$3,340	\$67,080	6	finance, insurance, real estate services	23%	19%	
				government	25%	20%	
					9%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Massachusetts by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	3,339,532	315,749	319,172	1,337,516	767,355	587,363	12,377	6
Department of Agriculture	21,574	15,529	0	160	5,364	521	0	21
Department of Commerce	57,772	26,479	0	27,207	3,682	49	355	5
Department of Defense	1,817,242	193,925	305,262	1,158,637	109,143	50,275	0	5
Department of Energy	99,989	20	0	7,177	86,485	6,307	0	13
Dept. of Health & Human Services	933,229	27,841	2,805	83,281	343,448	468,178	7,676	3
Department of the Interior	6,397	5,249	370	81	697	0	0	19
Department of Transportation	63,704	41,926	7,729	7,954	1,909	0	4,186	3
Environmental Protection Agency	25,613	0	0	15,532	8,030	1,891	160	5
Nat'l Aeronautics & Space Admin.	146,346	3,593	2,892	28,584	58,896	52,381	0	10
National Science Foundation	167,666	1,187	114	8,903	149,701	7,761	0	3
State rank	6	12	4	7	3	1	3	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

MARYLAND

Science and Engineering Profile

	MD	U.S.	Rank		MD	U.S.	Rank
Doctoral scientists, 1995	19,153	453,928	6	Total R&D performance, 1995 (millions)	\$6,519	\$177,210	9
Doctoral engineers, 1995	2,655	86,738	11	Industry R&D, 1995 (millions)	\$1,075	\$130,332	24
S&E doctorates awarded, 1996	672	27,230	12	Academic R&D, 1995 (millions)	\$1,160	\$21,606	4
of which, in life sciences	29%	25%		of which, in life sciences	40%	55%	
in engineering	22%	23%		in engineering	24%	16%	
in social sciences	17%	15%		in physical sciences	15%	10%	
S&E postdoctorates, 1995	1,049	35,379	10	Higher education current-fund expenditures, 1995 (millions)	\$3,795	\$182,602	15
in doctorate-granting institutions							
S&E graduate students, 1995	9,015	436,328	16	Number of SBIR awards, 1990-1996	1,318	26,399	4
in doctorate-granting institutions				Patents issued to state residents, 1996	1,101	61,099	18
Population, 1996 (000s)	5,072	269,067	19	Gross state product, 1994 (billions)	\$132.7	\$6,876.0	16
Civilian labor force, 1996 (000s)	2,786	135,528	18	of which, agriculture	1%	2%	
Personal income per capita, 1996	\$27,221	\$24,231	7	manufacturing, mining, construction	14%	23%	
Federal spending				transportation, communication, utilities	8%	9%	
Total expenditures, 1996 (millions)	\$37,041	\$1,368,858	11	wholesale and retail trade	15%	16%	
R&D obligations, 1995 (millions)	\$7,039	\$67,080	2	finance, insurance, real estate	22%	19%	
				services	22%	20%	
				government	18%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Maryland by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	7,039,183	4,158,824	143,265	1,956,488	654,050	123,499	3,057	2
Department of Agriculture	135,649	123,410	0	0	12,141	85	13	2
Department of Commerce	369,997	333,301	0	29,081	7,165	327	123	1
Department of Defense	2,914,007	1,716,240	1,429	953,869	217,720	24,749	0	3
Department of Energy	60,671	26,777	0	15,379	16,594	1,921	0	17
Dept. of Health & Human Services	2,239,094	1,583,184	141,636	197,376	314,004	2,192	702	1
Department of the Interior	16,863	16,377	0	172	312	2	0	5
Department of Transportation	52,528	7,153	0	41,199	2,304	0	1,872	5
Environmental Protection Agency	6,562	0	0	3,497	2,515	550	0	18
Nat'l Aeronautics & Space Admin.	1,189,026	348,891	200	704,674	45,024	89,890	347	3
National Science Foundation	54,786	3,491	0	11,241	36,271	3,783	0	12
State rank	2	1	9	4	5	7	26	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

MAINE

Science and Engineering Profile

	ME	U.S.	Rank		ME	U.S.	Rank
Doctoral scientists, 1995	2,231	453,928	39	Total R&D performance, 1995 (millions)	\$345	\$177,210	42
Doctoral engineers, 1995	267	86,738	44	Industry R&D, 1995 (millions)	\$286	\$130,332	39
S&E doctorates awarded, 1996	36	27,230	49	Academic R&D, 1995 (millions)	\$32	\$21,606	51
of which, in life sciences	39%	25%		of which, in life sciences	53%	55%	
in engineering	22%	23%		in environmental sciences	22%	6%	
in psychology	19%	13%		in engineering	14%	16%	
S&E postdoctorates, 1995	23	35,379	50	Higher education current-fund expenditures, 1995 (millions)	\$641	\$182,602	43
in doctorate-granting institutions							
S&E graduate students, 1995	900	436,328	50	Number of SBIR awards, 1990-1996	71	26,399	34
in doctorate-granting institutions				Patents issued to state residents, 1996	98	61,099	45
Population, 1996 (000s)	1,243	269,067	40	Gross state product, 1994 (billions)	\$26.1	\$6,876.0	44
Civilian labor force, 1996 (000s)	669	135,528	40	of which, agriculture	2%	2%	
Personal income per capita, 1996	\$20,826	\$24,231	38	manufacturing, mining, construction	22%	23%	
Federal spending				transportation, communication, utilities	7%	9%	
Total expenditures, 1996 (millions)	\$6,808	\$1,368,858	42	wholesale and retail trade	18%	16%	
R&D obligations, 1995 (millions)	\$54	\$67,080	47	finance, insurance, real estate services	18%	20%	
				government	14%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Maine by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	54,476	4,238	0	9,089	15,841	23,310	1,998	47
Department of Agriculture	5,857	1,146	0	0	4,711	0	0	45
Department of Commerce	3,061	701	0	0	2,249	5	106	29
Department of Defense	5,771	1,087	0	2,352	2,192	140	0	47
Department of Energy	5,898	0	0	3,778	870	1,250	0	37
Dept. of Health & Human Services	22,836	0	0	1,577	914	19,206	1,139	42
Department of the Interior	1,744	1,304	0	8	359	0	73	48
Department of Transportation	528	0	0	53	0	0	475	50
Environmental Protection Agency	585	0	0	300	285	0	0	41
Nat'l Aeronautics & Space Admin.	2,118	0	0	885	294	734	205	42
National Science Foundation	6,078	0	0	136	3,967	1,975	0	45
State rank	47	52	na	43	49	17	35	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

MICHIGAN

Science and Engineering Profile

	MI	U.S.	Rank		MI	U.S.	Rank
Doctoral scientists, 1995	12,724	453,928	12	Total R&D performance, 1995 (millions)	\$13,275	\$177,210	2
Doctoral engineers, 1995	3,306	86,738	8	Industry R&D, 1995 (millions)	\$12,388	\$130,332	2
S&E doctorates awarded, 1996	1,073	27,230	8	Academic R&D, 1995 (millions)	\$755	\$21,606	8
of which, in engineering	27%	23%		of which, in life sciences	55%	55%	
in life sciences	23%	25%		in engineering	19%	16%	
in social sciences	15%	15%		in social sciences	8%	5%	
S&E postdoctorates, 1995	1,198	35,379	7	Higher education current-fund expenditures, 1995 (millions)	\$6,252	\$182,602	8
in doctorate-granting institutions							
S&E graduate students, 1995	16,913	436,328	8	Number of SBIR awards, 1990-1996	474	26,399	15
in doctorate-granting institutions				Patents issued to state residents, 1996	3,179	61,099	4
Population, 1996 (000s)	9,594	269,067	8	Gross state product, 1994 (billions)	\$240.4	\$6,876.0	9
Civilian labor force, 1996 (000s)	4,807	135,528	8	of which, agriculture	1%	2%	
Personal income per capita, 1996	\$24,810	\$24,231	17	manufacturing, mining, construction	34%	23%	
Federal spending				transportation, communication, utilities	7%	9%	
Total expenditures, 1996 (millions)	\$39,287	\$1,368,858	9	wholesale and retail trade	15%	16%	
R&D obligations, 1995 (millions)	\$688	\$67,080	22	finance, insurance, real estate services	15%	19%	
				government	18%	20%	
					11%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Michigan by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	688,376	82,008	0	155,055	397,365	49,778	4,170	22
Department of Agriculture	20,205	5,836	0	158	14,211	0	0	25
Department of Commerce	47,728	6,483	0	38,426	1,086	1,604	129	6
Department of Defense	219,678	63,185	0	93,743	33,624	29,126	0	24
Department of Energy	13,779	0	0	265	12,477	1,037	0	30
Dept. of Health & Human Services	254,994	0	0	7,270	238,050	7,656	2,018	13
Department of the Interior	6,792	6,487	0	0	305	0	0	18
Department of Transportation	9,416	17	0	3,061	4,315	0	2,023	16
Environmental Protection Agency	21,217	0	0	6,722	12,267	2,228	0	7
Nat'l Aeronautics & Space Admin.	22,263	0	0	3,438	13,156	5,669	0	23
National Science Foundation	72,304	0	0	1,972	67,874	2,458	0	9
State rank	22	24	na	24	9	12	16	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

MINNESOTA

Science and Engineering Profile

	MN	U.S.	Rank		MN	U.S.	Rank
Doctoral scientists, 1995	8,324	453,928	18	Total R&D performance, 1995 (millions)	\$3,087	\$177,210	19
Doctoral engineers, 1995	1,262	86,738	22	Industry R&D, 1995 (millions)	\$2,636	\$130,332	14
S&E doctorates awarded, 1996	505	27,230	18	Academic R&D, 1995 (millions)	\$337	\$21,606	22
of which, in life sciences	31%	25%		of which, in life sciences	71%	55%	
in engineering	23%	23%		in engineering	10%	16%	
in social sciences	14%	15%		in math & computer sciences	6%	4%	
S&E postdoctorates, 1995	705	35,379	15	Higher education current-fund expenditures, 1995 (millions)	\$3,484	\$182,602	18
in doctorate-granting institutions							
S&E graduate students, 1995	5,823	436,328	26	Number of SBIR awards, 1990-1996	416	26,399	18
in doctorate-granting institutions				Patents issued to state residents, 1996	1,771	61,099	11
Population, 1996 (000s)	4,658	269,067	20	Gross state product, 1994 (billions)	\$124.6	\$6,876.0	20
Civilian labor force, 1996 (000s)	2,609	135,528	20	of which, agriculture	3%	2%	
Personal income per capita, 1996	\$25,580	\$24,231	10	manufacturing, mining, construction	25%	23%	
Federal spending				transportation, communication, utilities	8%	9%	
Total expenditures, 1996 (millions)	\$18,859	\$1,368,858	26	wholesale and retail trade	17%	16%	
R&D obligations, 1995 (millions)	\$571	\$67,080	24	finance, insurance, real estate	18%	19%	
				services	19%	20%	
				government	11%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Minnesota by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	571,128	30,139	0	254,153	195,912	84,775	6,149	24
Department of Agriculture	23,826	13,815	0	0	9,980	6	25	20
Department of Commerce	15,748	341	0	14,438	969	0	0	18
Department of Defense	255,331	1,197	0	220,840	11,207	22,087	0	21
Department of Energy	5,736	0	0	0	5,476	260	0	38
Dept. of Health & Human Services	198,156	0	0	4,625	128,051	61,831	3,649	17
Department of the Interior	4,101	3,870	0	5	199	0	27	29
Department of Transportation	6,338	0	0	3,775	240	0	2,323	23
Environmental Protection Agency	18,028	10,916	0	5,102	1,885	0	125	11
Nat'l Aeronautics & Space Admin.	7,422	0	0	3,981	3,024	417	0	33
National Science Foundation	36,442	0	0	1,387	34,881	174	0	20
State rank	24	40	na	20	20	9	6	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

MISSOURI

Science and Engineering Profile

	MO	U.S.	Rank		MO	U.S.	Rank
Doctoral scientists, 1995	7,996	453,928	19	Total R&D performance, 1995 (millions)	\$2,499	\$177,210	21
Doctoral engineers, 1995	1,288	86,738	21	Industry R&D, 1995 (millions)	\$2,028	\$130,332	16
S&E doctorates awarded, 1996	446	27,230	22	Academic R&D, 1995 (millions)	\$397	\$21,606	17
of which, in engineering	25%	23%		of which, in life sciences	77%	55%	
in life sciences	23%	25%		in engineering	8%	16%	
in social sciences	15%	15%		in physical sciences	6%	10%	
S&E postdoctorates, 1995	800	35,379	14	Higher education current-fund expenditures, 1995 (millions)	\$3,734	\$182,602	17
in doctorate-granting institutions							
S&E graduate students, 1995	7,116	436,328	21	Number of SBIR awards, 1990-1996	107	26,399	28
in doctorate-granting institutions				Patents issued to state residents, 1996	656	61,099	23
Population, 1996 (000s)	5,359	269,067	16	Gross state product, 1994 (billions)	\$128.2	\$6,876.0	17
Civilian labor force, 1996 (000s)	2,898	135,528	16	of which, agriculture	2%	2%	
Personal income per capita, 1996	\$22,864	\$24,231	26	manufacturing, mining, construction	26%	23%	
Federal spending				transportation, communication, utilities	11%	9%	
Total expenditures, 1996 (millions)	\$35,095	\$1,368,858	13	wholesale and retail trade	17%	16%	
R&D obligations, 1995 (millions)	\$1,613	\$67,080	14	finance, insurance, real estate	15%	19%	
				services	19%	20%	
				government	11%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Missouri by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	1,613,322	55,445	0	1,303,721	232,766	17,723	3,667	14
Department of Agriculture	19,702	7,993	0	80	11,629	0	0	26
Department of Commerce	164	48	0	0	116	0	0	45
Department of Defense	1,342,017	37,942	0	1,295,299	8,776	0	0	9
Department of Energy	5,234	10	0	0	4,889	335	0	42
Dept. of Health & Human Services	203,994	0	0	380	185,524	16,240	1,850	15
Department of the Interior	10,059	9,371	0	153	475	0	60	14
Department of Transportation	2,063	0	0	306	0	0	1,757	35
Environmental Protection Agency	1,434	0	0	801	439	194	0	31
Nat'l Aeronautics & Space Admin.	11,873	0	0	6,329	5,544	0	0	26
National Science Foundation	16,782	81	0	373	15,374	954	0	27
State rank	14	31	na	8	15	20	21	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

MISSISSIPPI

Science and Engineering Profile

	MS	U.S.	Rank		MS	U.S.	Rank
Doctoral scientists, 1995	2,585	453,928	37	Total R&D performance, 1995 (millions)	\$315	\$177,210	45
Doctoral engineers, 1995	508	86,738	35	Industry R&D, 1995 (millions)	\$66	\$130,332	44
S&E doctorates awarded, 1996	151	27,230	37	Academic R&D, 1995 (millions)	\$113	\$21,606	36
of which, in life sciences	34%	25%		of which, in life sciences	54%	55%	
in psychology	22%	13%		in engineering	20%	16%	
in physical sciences	19%	14%		in physical sciences	12%	10%	
S&E postdoctorates, 1995	89	35,379	38	Higher education current-fund expenditures, 1995 (millions)	\$1,489	\$182,602	34
in doctorate-granting institutions							
S&E graduate students, 1995	3,176	436,328	35	Number of SBIR awards, 1990-1996	27	26,399	44
in doctorate-granting institutions				Patents issued to state residents, 1996	137	61,099	41
Population, 1996 (000s)	2,716	269,067	32	Gross state product, 1994 (billions)	\$50.6	\$6,876.0	32
Civilian labor force, 1996 (000s)	1,262	135,528	33	of which, agriculture	3%	2%	
Personal income per capita, 1996	\$17,471	\$24,231	51	manufacturing, mining, construction	28%	23%	
Federal spending				transportation, communication, utilities	12%	9%	
Total expenditures, 1996 (millions)	\$15,184	\$1,368,858	30	wholesale and retail trade	16%	16%	
R&D obligations, 1995 (millions)	\$213	\$67,080	35	finance, insurance, real estate	11%	19%	
				services	15%	20%	
				government	15%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Mississippi by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	212,739	132,616	0	26,162	49,283	3,305	1,373	35
Department of Agriculture	50,877	36,399	0	0	13,740	738	0	6
Department of Commerce	7,552	6,451	0	0	1,066	0	35	26
Department of Defense	97,879	68,000	0	18,264	11,615	0	0	28
Department of Energy	3,643	0	0	258	3,385	0	0	44
Dept. of Health & Human Services	12,032	0	0	100	11,309	232	391	45
Department of the Interior	2,520	2,442	0	0	78	0	0	43
Department of Transportation	2,091	1,103	0	0	41	0	947	34
Environmental Protection Agency	1,195	0	0	0	758	437	0	37
Nat'l Aeronautics & Space Admin.	29,155	18,218	0	7,540	1,499	1,898	0	20
National Science Foundation	5,795	3	0	0	5,792	0	0	46
State rank	35	21	na	37	38	36	43	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

MONTANA

Science and Engineering Profile

	MT	U.S.	Rank		MT	U.S.	Rank
Doctoral scientists, 1995	1,765	453,928	44	Total R&D performance, 1995 (millions)	\$119	\$177,210	48
Doctoral engineers, 1995	140	86,738	50	Industry R&D, 1995 (millions)	\$17	\$130,332	49
S&E doctorates awarded, 1996	48	27,230	46	Academic R&D, 1995 (millions)	\$67	\$21,606	43
of which, in life sciences	44%	25%		of which, in life sciences	67%	55%	
in physical sciences	25%	14%		in physical sciences	10%	10%	
in math & computer sciences	13%	8%		in engineering	9%	16%	
S&E postdoctorates, 1995	47	35,379	44	Higher education current-fund expenditures, 1995 (millions)	\$427	\$182,602	49
in doctorate-granting institutions							
S&E graduate students, 1995	1,303	436,328	45	Number of SBIR awards, 1990-1996	47	26,399	39
in doctorate-granting institutions				Patents issued to state residents, 1996	110	61,099	44
Population, 1996 (000s)	879	269,067	45	Gross state product, 1994 (billions)	\$16.9	\$6,876.0	49
Civilian labor force, 1996 (000s)	447	135,528	45	of which, agriculture	6%	2%	
Personal income per capita, 1996	\$19,047	\$24,231	47	manufacturing, mining, construction	17%	23%	
Federal spending				transportation, communication, utilities	13%	9%	
Total expenditures, 1996 (millions)	\$4,973	\$1,368,858	46	wholesale and retail trade	16%	16%	
R&D obligations, 1995 (millions)	\$65	\$67,080	45	finance, insurance, real estate services	13%	19%	
				government	18%	20%	
					16%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Montana by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	64,821	33,553	0	6,346	21,239	1,677	2,006	45
Department of Agriculture	15,367	9,792	0	60	5,376	139	0	33
Department of Commerce	2,084	0	0	2,084	0	0	0	34
Department of Defense	9,383	6,092	0	1,182	2,109	0	0	46
Department of Energy	4,847	195	0	2,264	1,288	285	815	43
Dept. of Health & Human Services	17,503	12,400	0	50	3,667	1,205	181	44
Department of the Interior	5,541	5,074	0	80	387	0	0	25
Department of Transportation	1,010	0	0	0	0	0	1,010	46
Environmental Protection Agency	205	0	0	0	205	0	0	47
Nat'l Aeronautics & Space Admin.	2,255	0	0	561	1,694	0	0	41
National Science Foundation	6,626	0	0	65	6,513	48	0	44
State rank	45	38	na	45	47	42	34	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

NORTH CAROLINA

Science and Engineering Profile

	NC	U.S.	Rank		NC	U.S.	Rank
Doctoral scientists, 1995	12,426	453,928	13	Total R&D performance, 1995 (millions)	\$3,191	\$177,210	16
Doctoral engineers, 1995	1,540	86,738	17	Industry R&D, 1995 (millions)	\$2,226	\$130,332	15
S&E doctorates awarded, 1996	708	27,230	11	Academic R&D, 1995 (millions)	\$687	\$21,606	9
of which, in life sciences	37%	25%		of which, in life sciences	71%	55%	
in engineering	19%	23%		in engineering	10%	16%	
in physical sciences	12%	14%		in social sciences	6%	5%	
S&E postdoctorates, 1995	1,358	35,379	6	Higher education current-fund expenditures, 1995 (millions)	\$5,736	\$182,602	9
in doctorate-granting institutions							
S&E graduate students, 1995	9,535	436,328	13	Number of SBIR awards, 1990-1996	296	26,399	23
in doctorate-granting institutions				Patents issued to state residents, 1996	1,188	61,099	15
Population, 1996 (000s)	7,323	269,067	11	Gross state product, 1994 (billions)	\$181.5	\$6,876.0	12
Civilian labor force, 1996 (000s)	3,796	135,528	10	of which, agriculture	2%	2%	
Personal income per capita, 1996	\$22,010	\$24,231	33	manufacturing, mining, construction	34%	23%	
Federal spending				transportation, communication, utilities	8%	9%	
Total expenditures, 1996 (millions)	\$32,772	\$1,368,858	15	wholesale and retail trade	15%	16%	
R&D obligations, 1995 (millions)	\$825	\$67,080	21	finance, insurance, real estate services	13%	19%	
				government	15%	20%	
					13%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in North Carolina by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	825,433	220,179	0	99,913	440,465	59,002	5,874	21
Department of Agriculture	32,586	16,903	0	80	15,574	19	10	15
Department of Commerce	18,415	5,387	0	6,796	5,680	74	478	15
Department of Defense	136,748	53,262	0	48,037	33,218	2,231	0	26
Department of Energy	13,504	844	0	50	11,296	1,314	0	31
Dept. of Health & Human Services	434,731	68,595	0	15,207	310,668	37,036	3,225	7
Department of the Interior	3,645	3,265	0	95	285	0	0	35
Department of Transportation	6,418	0	0	1,654	2,438	250	2,076	22
Environmental Protection Agency	116,207	71,885	0	24,401	8,169	11,752	0	1
Nat'l Aeronautics & Space Admin.	11,738	16	0	877	7,484	3,361	0	27
National Science Foundation	51,441	22	0	2,716	45,653	2,965	85	14
State rank	21	16	na	28	7	11	8	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

NORTH DAKOTA

Science and Engineering Profile

	ND	U.S.	Rank		ND	U.S.	Rank
Doctoral scientists, 1995	1,341	453,928	48	Total R&D performance, 1995 (millions)	\$98	\$177,210	49
Doctoral engineers, 1995	156	86,738	47	Industry R&D, 1995 (millions)	\$12	\$130,332	51
S&E doctorates awarded, 1996	54	27,230	44	Academic R&D, 1995 (millions)	\$60	\$21,606	44
of which, in life sciences	41%	25%		of which, in life sciences	53%	55%	
in psychology	26%	13%		in engineering	26%	16%	
in physical sciences	20%	14%		in physical sciences	7%	10%	
S&E postdoctorates, 1995	42	35,379	47	Higher education current-fund expenditures, 1995 (millions)	\$494	\$182,602	47
in doctorate-granting institutions							
S&E graduate students, 1995	966	436,328	48	Number of SBIR awards, 1990-1996	20	26,399	46
in doctorate-granting institutions				Patents issued to state residents, 1996	62	61,099	47
Population, 1996 (000s)	644	269,067	48	Gross state product, 1994 (billions)	\$13.5	\$6,876.0	51
Civilian labor force, 1996 (000s)	343	135,528	48	of which, agriculture	10%	2%	
Personal income per capita, 1996	\$20,710	\$24,231	39	manufacturing, mining, construction	14%	23%	
Federal spending				transportation, communication, utilities	11%	9%	
Total expenditures, 1996 (millions)	\$3,570	\$1,368,858	49	wholesale and retail trade	19%	16%	
R&D obligations, 1995 (millions)	\$47	\$67,080	49	finance, insurance, real estate	12%	19%	
				services	17%	20%	
				government	16%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in North Dakota by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	47,313	25,042	0	539	20,054	947	731	49
Department of Agriculture	25,321	19,372	0	80	5,869	0	0	19
Department of Commerce	289	0	0	9	280	0	0	43
Department of Defense	1,355	319	0	161	875	0	0	50
Department of Energy	5,453	0	0	0	5,453	0	0	40
Dept. of Health & Human Services	2,947	0	0	0	2,147	660	140	48
Department of the Interior	5,445	5,351	0	16	78	0	0	26
Department of Transportation	1,145	0	0	7	260	287	591	45
Environmental Protection Agency	1,318	0	0	220	1,098	0	0	33
Nat'l Aeronautics & Space Admin.	584	0	0	46	538	0	0	51
National Science Foundation	3,456	0	0	0	3,456	0	0	51
State rank	49	42	na	50	48	47	49	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

NEBRASKA

Science and Engineering Profile

	NE	U.S.	Rank		NE	U.S.	Rank
Doctoral scientists, 1995	2,587	453,928	36	Total R&D performance, 1995 (millions)	\$336	\$177,210	43
Doctoral engineers, 1995	327	86,738	42	Industry R&D, 1995 (millions)	\$150	\$130,332	43
S&E doctorates awarded, 1996	170	27,230	36	Academic R&D, 1995 (millions)	\$157	\$21,606	34
of which, in life sciences	43%	25%		of which, in life sciences	76%	55%	
in psychology	18%	13%		in engineering	12%	16%	
in social sciences	13%	15%		in physical sciences	5%	10%	
S&E postdoctorates, 1995	160	35,379	33	Higher education current-fund expenditures, 1995 (millions)	\$1,397	\$182,602	35
in doctorate-granting institutions							
S&E graduate students, 1995	3,044	436,328	37	Number of SBIR awards, 1990-1996	38	26,399	42
in doctorate-granting institutions				Patents issued to state residents, 1996	167	61,099	40
Population, 1996 (000s)	1,652	269,067	38	Gross state product, 1994 (billions)	\$41.4	\$6,876.0	37
Civilian labor force, 1996 (000s)	913	135,528	36	of which, agriculture	8%	2%	
Personal income per capita, 1996	\$23,047	\$24,231	25	manufacturing, mining, construction	19%	23%	
Federal spending				transportation, communication, utilities	11%	9%	
Total expenditures, 1996 (millions)	\$7,595	\$1,368,858	40	wholesale and retail trade	16%	16%	
R&D obligations, 1995 (millions)	\$87	\$67,080	43	finance, insurance, real estate services	14%	19%	
				government	16%	20%	
					15%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Nebraska by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	86,762	23,132	0	4,011	52,549	5,754	1,316	43
Department of Agriculture	25,797	17,206	0	0	8,491	100	0	18
Department of Commerce	30	0	0	0	30	0	0	50
Department of Defense	10,206	2,692	0	2,676	4,334	504	0	45
Department of Energy	6,217	0	0	210	6,007	0	0	34
Dept. of Health & Human Services	27,554	0	0	932	20,950	5,150	522	39
Department of the Interior	3,809	3,234	0	0	527	0	48	33
Department of Transportation	746	0	0	0	0	0	746	47
Environmental Protection Agency	79	0	0	0	79	0	0	49
Nat'l Aeronautics & Space Admin.	1,919	0	0	149	1,770	0	0	44
National Science Foundation	10,405	0	0	44	10,361	0	0	35
State rank	43	43	na	47	36	34	44	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

NEW HAMPSHIRE

Science and Engineering Profile

	NH	U.S.	Rank		NH	U.S.	Rank
Doctoral scientists, 1995	1,848	453,928	42	Total R&D performance, 1995 (millions)	\$598	\$177,210	35
Doctoral engineers, 1995	420	86,738	38	Industry R&D, 1995 (millions)	\$472	\$130,332	35
S&E doctorates awarded, 1996	83	27,230	40	Academic R&D, 1995 (millions)	\$93	\$21,606	38
of which, in life sciences	34%	25%		of which, in life sciences	52%	55%	
in physical sciences	28%	14%		in environmental sciences	24%	6%	
in engineering	17%	23%		in engineering	9%	16%	
S&E postdoctorates, 1995	106	35,379	36	Higher education current-fund expenditures, 1995 (millions)	\$879	\$182,602	40
in doctorate-granting institutions							
S&E graduate students, 1995	1,140	436,328	47	Number of SBIR awards, 1990-1996	300	26,399	22
in doctorate-granting institutions				Patents issued to state residents, 1996	419	61,099	30
Population, 1996 (000s)	1,162	269,067	43	Gross state product, 1994 (billions)	\$29.4	\$6,876.0	42
Civilian labor force, 1996 (000s)	624	135,528	41	of which, agriculture	1%	2%	
Personal income per capita, 1996	\$26,520	\$24,231	9	manufacturing, mining, construction	24%	23%	
Federal spending				transportation, communication, utilities	8%	9%	
Total expenditures, 1996 (millions)	\$5,001	\$1,368,858	45	wholesale and retail trade	16%	16%	
R&D obligations, 1995 (millions)	\$214	\$67,080	34	finance, insurance, real estate	22%	19%	
				services	19%	20%	
				government	10%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in New Hampshire by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	213,647	30,902	0	121,212	59,179	1,722	632	34
Department of Agriculture	4,587	2,326	0	10	2,248	0	3	49
Department of Commerce	15,858	0	0	14,741	1,077	0	40	17
Department of Defense	130,311	24,105	0	100,521	4,600	1,085	0	27
Department of Energy	1,335	0	0	0	1,281	54	0	47
Dept. of Health & Human Services	35,525	0	0	2,427	32,427	558	113	36
Department of the Interior	1,300	1,087	0	0	213	0	0	50
Department of Transportation	2,594	1,741	0	377	25	0	451	31
Environmental Protection Agency	500	0	0	0	500	0	0	43
Nat'l Aeronautics & Space Admin.	12,422	132	0	2,908	9,332	25	25	25
National Science Foundation	9,215	1,511	0	228	7,476	0	0	38
State rank	34	39	na	26	35	41	50	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

NEW JERSEY

Science and Engineering Profile

	NJ	U.S.	Rank		NJ	U.S.	Rank
Doctoral scientists, 1995	17,171	453,928	8	Total R&D performance, 1995 (millions)	\$9,128	\$177,210	5
Doctoral engineers, 1995	4,117	86,738	4	Industry R&D, 1995 (millions)	\$8,200	\$130,332	4
S&E doctorates awarded, 1996	659	27,230	13	Academic R&D, 1995 (millions)	\$443	\$21,606	16
of which, in engineering	27%	23%		of which, in life sciences	46%	55%	
in life sciences	23%	25%		in engineering	19%	16%	
in physical sciences	16%	14%		in physical sciences	11%	10%	
S&E postdoctorates, 1995	661	35,379	17	Higher education current-fund expenditures, 1995 (millions)	\$4,235	\$182,602	13
in doctorate-granting institutions							
S&E graduate students, 1995	10,614	436,328	11	Number of SBIR awards, 1990-1996	851	26,399	9
in doctorate-granting institutions				Patents issued to state residents, 1996	3,091	61,099	6
Population, 1996 (000s)	7,988	269,067	9	Gross state product, 1994 (billions)	\$254.9	\$6,876.0	8
Civilian labor force, 1996 (000s)	4,124	135,528	9	of which, agriculture	1%	2%	
Personal income per capita, 1996	\$31,053	\$24,231	3	manufacturing, mining, construction	18%	23%	
Federal spending				transportation, communication, utilities	10%	9%	
Total expenditures, 1996 (millions)	\$38,347	\$1,368,858	10	wholesale and retail trade	17%	16%	
R&D obligations, 1995 (millions)	\$1,326	\$67,080	15	finance, insurance, real estate	22%	19%	
				services	21%	20%	
				government	11%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in New Jersey by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	1,325,902	343,667	119,414	630,884	215,220	11,332	5,385	15
Department of Agriculture	7,235	548	0	159	6,528	0	0	41
Department of Commerce	44,822	14,582	0	26,891	3,209	21	119	7
Department of Defense	676,659	290,002	4,130	345,474	36,840	213	0	15
Department of Energy	157,547	0	115,178	18,254	23,825	290	0	11
Dept. of Health & Human Services	106,047	0	0	12,847	81,407	9,784	2,009	24
Department of the Interior	4,101	2,944	0	1,009	148	0	0	29
Department of Transportation	81,417	35,281	0	40,757	2,222	0	3,157	2
Environmental Protection Agency	8,228	0	0	313	7,700	115	100	16
Nat'l Aeronautics & Space Admin.	189,885	235	0	182,017	7,145	488	0	9
National Science Foundation	49,961	75	106	3,163	46,196	421	0	15
State rank	15	11	10	14	18	24	10	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

NEW MEXICO

Science and Engineering Profile

	NM	U.S.	Rank		NM	U.S.	Rank
Doctoral scientists, 1995	5,596	453,928	26	Total R&D performance, 1995 (millions)	\$3,295	\$177,210	15
Doctoral engineers, 1995	1,866	86,738	15	Industry R&D, 1995 (millions)	\$1,461	\$130,332	20
S&E doctorates awarded, 1996	197	27,230	33	Academic R&D, 1995 (millions)	\$230	\$21,606	28
of which, in engineering	27%	23%		of which, in engineering	56%	16%	
in life sciences	20%	25%		in life sciences	24%	55%	
in physical sciences	19%	14%		in environmental sciences	6%	6%	
S&E postdoctorates, 1995	77	35,379	41	Higher education current-fund expenditures, 1995 (millions)	\$1,321	\$182,602	36
in doctorate-granting institutions							
S&E graduate students, 1995	3,548	436,328	34	Number of SBIR awards, 1990-1996	527	26,399	14
in doctorate-granting institutions				Patents issued to state residents, 1996	225	61,099	38
Population, 1996 (000s)	1,713	269,067	37	Gross state product, 1994 (billions)	\$37.8	\$6,876.0	39
Civilian labor force, 1996 (000s)	800	135,528	39	of which, agriculture	2%	2%	
Personal income per capita, 1996	\$18,770	\$24,231	49	manufacturing, mining, construction	25%	23%	
Federal spending				transportation, communication, utilities	10%	9%	
Total expenditures, 1996 (millions)	\$12,073	\$1,368,858	35	wholesale and retail trade	14%	16%	
R&D obligations, 1995 (millions)	\$1,987	\$67,080	12	finance, insurance, real estate services	14%	19%	
				government	17%	20%	
					18%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in New Mexico by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	1,987,076	481,047	1,177,991	226,496	92,493	6,218	2,831	12
Department of Agriculture	5,864	3,044	0	0	2,816	4	0	44
Department of Commerce	341	0	0	301	40	0	0	42
Department of Defense	780,776	451,841	103,573	202,439	22,405	70	448	13
Department of Energy	1,066,387	0	1,054,951	6,249	3,006	2,181	0	1
Dept. of Health & Human Services	35,773	1,402	769	1,458	28,710	2,407	1,027	35
Department of the Interior	5,219	4,770	85	72	257	0	35	28
Department of Transportation	19,876	0	16,639	1,465	451	0	1,321	8
Environmental Protection Agency	2,304	0	0	1,535	460	309	0	28
Nat'l Aeronautics & Space Admin.	56,080	19,350	812	11,806	23,906	206	0	14
National Science Foundation	14,456	640	1,162	1,171	10,442	1,041	0	29
State rank	12	9	2	21	30	31	29	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

NEVADA

Science and Engineering Profile

	NV	U.S.	Rank		NV	U.S.	Rank
Doctoral scientists, 1995	1,423	453,928	46	Total R&D performance, 1995 (millions)	\$445	\$177,210	40
Doctoral engineers, 1995	313	86,738	43	Industry R&D, 1995 (millions)	\$322	\$130,332	37
S&E doctorates awarded, 1996	48	27,230	46	Academic R&D, 1995 (millions)	\$87	\$21,606	40
of which, in life sciences	25%	25%		of which, in environmental sciences	30%	6%	
in environmental sciences	19%	3%		in life sciences	29%	55%	
in engineering	17%	23%		in engineering	10%	16%	
S&E postdoctorates, 1995	54	35,379	43	Higher education current-fund expenditures, 1995 (millions)	\$456	\$182,602	48
in doctorate-granting institutions							
S&E graduate students, 1995	1,681	436,328	43	Number of SBIR awards, 1990-1996	54	26,399	37
in doctorate-granting institutions				Patents issued to state residents, 1996	195	61,099	39
Population, 1996 (000s)	1,603	269,067	39	Gross state product, 1994 (billions)	\$44.0	\$6,876.0	35
Civilian labor force, 1996 (000s)	844	135,528	37	of which, agriculture	1%	2%	
Personal income per capita, 1996	\$25,451	\$24,231	11	manufacturing, mining, construction	15%	23%	
Federal spending				transportation, communication, utilities	8%	9%	
Total expenditures, 1996 (millions)	\$7,428	\$1,368,858	41	wholesale and retail trade	14%	16%	
R&D obligations, 1995 (millions)	\$373	\$67,080	28	finance, insurance, real estate services	18%	19%	
				government	34%	20%	
					11%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Nevada by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	372,570	34,669	0	313,505	22,107	1,457	832	28
Department of Agriculture	3,160	880	0	0	2,244	36	0	51
Department of Commerce	728	0	0	16	712	0	0	39
Department of Defense	19,611	12,430	0	6,678	503	0	0	39
Department of Energy	298,870	10	0	295,590	3,195	75	0	8
Dept. of Health & Human Services	6,245	0	0	0	4,656	1,346	243	46
Department of the Interior	11,738	10,420	0	0	1,318	0	0	12
Department of Transportation	10,106	0	0	9,268	249	0	589	15
Environmental Protection Agency	12,583	10,894	0	753	936	0	0	13
Nat'l Aeronautics & Space Admin.	1,949	35	0	953	961	0	0	43
National Science Foundation	7,580	0	0	247	7,333	0	0	43
State rank	28	36	na	19	45	43	48	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

NEW YORK

Science and Engineering Profile

	NY	U.S.	Rank		NY	U.S.	Rank
Doctoral scientists, 1995	36,935	453,928	2	Total R&D performance, 1995 (millions)	\$10,954	\$177,210	3
Doctoral engineers, 1995	5,425	86,738	3	Industry R&D, 1995 (millions)	\$8,651	\$130,332	3
S&E doctorates awarded, 1996	2,543	27,230	2	Academic R&D, 1995 (millions)	\$1,702	\$21,606	2
of which, in life sciences	25%	25%		of which, in life sciences	64%	55%	
in engineering	17%	23%		in engineering	11%	16%	
in social sciences	17%	15%		in physical sciences	9%	10%	
S&E postdoctorates, 1995	2,892	35,379	3	Higher education current-fund expenditures, 1995 (millions)	\$17,576	\$182,602	2
in doctorate-granting institutions							
S&E graduate students, 1995	38,875	436,328	2	Number of SBIR awards, 1990-1996	1,247	26,399	5
in doctorate-granting institutions				Patents issued to state residents, 1996	5,176	61,099	2
Population, 1996 (000s)	18,185	269,067	3	Gross state product, 1994 (billions)	\$571.0	\$6,876.0	2
Civilian labor force, 1996 (000s)	8,639	135,528	3	of which, agriculture	0%	2%	
Personal income per capita, 1996	\$28,782	\$24,231	5	manufacturing, mining, construction	15%	23%	
Federal spending				transportation, communication, utilities	8%	9%	
Total expenditures, 1996 (millions)	\$94,670	\$1,368,858	2	wholesale and retail trade	13%	16%	
R&D obligations, 1995 (millions)	\$2,581	\$67,080	8	finance, insurance, real estate services	29%	19%	
				government	23%	20%	
					11%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in New York by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	2,581,383	117,250	203,873	947,675	1,026,807	202,749	83,029	8
Department of Agriculture	31,828	14,650	0	80	15,584	1,514	0	16
Department of Commerce	21,434	181	50	18,221	2,814	41	127	13
Department of Defense	774,006	82,646	2,688	591,309	95,184	2,179	0	14
Department of Energy	572,819	14,000	199,269	293,116	53,623	12,811	0	3
Dept. of Health & Human Services	910,325	485	0	14,433	647,377	170,992	77,038	4
Department of the Interior	5,335	4,972	0	64	274	25	0	27
Department of Transportation	15,059	0	65	5,723	2,743	1,324	5,204	11
Environmental Protection Agency	7,333	0	0	2,130	4,087	968	148	17
Nat'l Aeronautics & Space Admin.	43,481	316	353	18,658	23,120	976	58	16
National Science Foundation	199,763	0	1,448	3,941	182,001	11,919	454	2
State rank	8	23	8	11	2	3	1	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

OHIO

Science and Engineering Profile

	OH	U.S.	Rank		OH	U.S.	Rank
Doctoral scientists, 1995	15,710	453,928	9	Total R&D performance, 1995 (millions)	\$5,314	\$177,210	10
Doctoral engineers, 1995	3,950	86,738	5	Industry R&D, 1995 (millions)	\$4,001	\$130,332	11
S&E doctorates awarded, 1996	1,094	27,230	7	Academic R&D, 1995 (millions)	\$643	\$21,606	11
of which, in engineering	28%	23%		of which, in life sciences	52%	55%	
in life sciences	22%	25%		in engineering	27%	16%	
in physical sciences	17%	14%		in physical sciences	9%	10%	
S&E postdoctorates, 1995	1,035	35,379	11	Higher education current-fund expenditures, 1995 (millions)	\$6,813	\$182,602	7
in doctorate-granting institutions							
S&E graduate students, 1995	21,896	436,328	5	Number of SBIR awards, 1990-1996	746	26,399	11
in doctorate-granting institutions				Patents issued to state residents, 1996	2,616	61,099	8
Population, 1996 (000s)	11,173	269,067	7	Gross state product, 1994 (billions)	\$274.8	\$6,876.0	7
Civilian labor force, 1996 (000s)	5,643	135,528	7	of which, agriculture	1%	2%	
Personal income per capita, 1996	\$23,537	\$24,231	22	manufacturing, mining, construction	31%	23%	
Federal spending				transportation, communication, utilities	8%	9%	
Total expenditures, 1996 (millions)	\$50,145	\$1,368,858	8	wholesale and retail trade	16%	16%	
R&D obligations, 1995 (millions)	\$1,811	\$67,080	13	finance, insurance, real estate services	15%	19%	
				government	17%	20%	
					11%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Ohio by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	1,811,413	599,044	0	810,049	326,720	71,914	3,686	13
Department of Agriculture	15,947	6,593	0	0	9,324	23	7	32
Department of Commerce	13,284	560	0	11,899	724	101	0	21
Department of Defense	854,591	298,948	0	492,251	56,184	7,208	0	12
Department of Energy	47,590	0	0	40,358	7,163	28	41	18
Dept. of Health & Human Services	288,112	38,723	0	6,603	189,606	52,799	381	11
Department of the Interior	3,643	2,958	0	0	685	0	0	36
Department of Transportation	21,413	7,373	0	8,439	2,104	509	2,988	7
Environmental Protection Agency	58,993	43,139	0	8,220	5,409	1,992	233	3
Nat'l Aeronautics & Space Admin.	470,914	200,750	0	241,328	19,626	9,174	36	6
National Science Foundation	36,926	0	0	951	35,895	80	0	19
State rank	13	6	na	12	11	10	20	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

OKLAHOMA

Science and Engineering Profile

	OK	U.S.	Rank		OK	U.S.	Rank
Doctoral scientists, 1995	3,909	453,928	32	Total R&D performance, 1995 (millions)	\$529	\$177,210	37
Doctoral engineers, 1995	877	86,738	29	Industry R&D, 1995 (millions)	\$288	\$130,332	38
S&E doctorates awarded, 1996	247	27,230	31	Academic R&D, 1995 (millions)	\$186	\$21,606	31
of which, in engineering	27%	23%		of which, in life sciences	49%	55%	
in life sciences	26%	25%		in engineering	20%	16%	
in psychology	14%	13%		in social sciences	9%	5%	
S&E postdoctorates, 1995	172	35,379	32	Higher education current-fund expenditures, 1995 (millions)	\$1,561	\$182,602	33
in doctorate-granting institutions							
S&E graduate students, 1995	4,616	436,328	30	Number of SBIR awards, 1990-1996	69	26,399	36
in doctorate-granting institutions				Patents issued to state residents, 1996	481	61,099	26
Population, 1996 (000s)	3,301	269,067	28	Gross state product, 1994 (billions)	\$66.2	\$6,876.0	30
Civilian labor force, 1996 (000s)	1,577	135,528	30	of which, agriculture	3%	2%	
Personal income per capita, 1996	\$19,350	\$24,231	45	manufacturing, mining, construction	25%	23%	
Federal spending				transportation, communication, utilities	11%	9%	
Total expenditures, 1996 (millions)	\$16,686	\$1,368,858	29	wholesale and retail trade	16%	16%	
R&D obligations, 1995 (millions)	\$159	\$67,080	39	finance, insurance, real estate services	12%	19%	
				government	16%	20%	
					16%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Oklahoma by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	159,395	45,104	0	55,518	47,519	9,289	1,965	39
Department of Agriculture	17,196	9,280	0	0	7,848	34	34	28
Department of Commerce	8,486	6,320	0	1,108	1,058	0	0	23
Department of Defense	33,961	11,762	0	18,874	3,325	0	0	35
Department of Energy	37,972	1,833	0	32,009	4,130	0	0	21
Dept. of Health & Human Services	27,330	0	0	516	17,123	8,924	767	40
Department of the Interior	2,868	2,628	0	0	240	0	0	39
Department of Transportation	8,856	6,737	0	723	232	0	1,164	18
Environmental Protection Agency	8,880	6,207	0	2,288	385	0	0	15
Nat'l Aeronautics & Space Admin.	1,132	337	0	0	760	35	0	47
National Science Foundation	12,714	0	0	0	12,418	296	0	32
State rank	39	33	na	31	39	26	36	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

OREGON

Science and Engineering Profile

	OR	U.S.	Rank		OR	U.S.	Rank
Doctoral scientists, 1995	5,731	453,928	24	Total R&D performance, 1995 (millions)	\$1,089	\$177,210	30
Doctoral engineers, 1995	895	86,738	28	Industry R&D, 1995 (millions)	\$741	\$130,332	29
S&E doctorates awarded, 1996	300	27,230	27	Academic R&D, 1995 (millions)	\$259	\$21,606	27
of which, in life sciences	37%	25%		of which, in life sciences	62%	55%	
in engineering	15%	23%		in environmental sciences	13%	6%	
in physical sciences	13%	14%		in engineering	7%	16%	
S&E postdoctorates, 1995	347	35,379	26	Higher education current-fund expenditures, 1995 (millions)	\$2,122	\$182,602	28
in doctorate-granting institutions							
S&E graduate students, 1995	4,392	436,328	31	Number of SBIR awards, 1990-1996	344	26,399	20
in doctorate-granting institutions				Patents issued to state residents, 1996	772	61,099	22
Population, 1996 (000s)	3,204	269,067	30	Gross state product, 1994 (billions)	\$74.4	\$6,876.0	28
Civilian labor force, 1996 (000s)	1,721	135,528	27	of which, agriculture	3%	2%	
Personal income per capita, 1996	\$22,668	\$24,231	28	manufacturing, mining, construction	25%	23%	
Federal spending				transportation, communication, utilities	8%	9%	
Total expenditures, 1996 (millions)	\$14,173	\$1,368,858	31	wholesale and retail trade	17%	16%	
R&D obligations, 1995 (millions)	\$277	\$67,080	32	finance, insurance, real estate	17%	19%	
				services	18%	20%	
				government	13%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Oregon by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	277,229	55,959	0	39,176	144,181	33,120	4,793	32
Department of Agriculture	37,438	21,277	0	0	15,933	190	38	10
Department of Commerce	13,681	9,197	0	2,493	1,933	0	58	20
Department of Defense	38,889	1,466	0	21,863	15,530	30	0	32
Department of Energy	15,702	480	0	1,795	11,515	200	1,712	28
Dept. of Health & Human Services	101,921	0	0	6,879	62,181	31,559	1,302	25
Department of the Interior	13,529	13,321	0	19	189	0	0	10
Department of Transportation	2,128	0	0	0	995	0	1,133	33
Environmental Protection Agency	20,509	10,090	0	3,706	6,163	0	550	8
Nat'l Aeronautics & Space Admin.	7,874	128	0	1,677	5,470	599	0	30
National Science Foundation	25,558	0	0	744	24,272	542	0	23
State rank	32	30	na	34	26	16	14	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

PENNSYLVANIA

Science and Engineering Profile

	PA	U.S.	Rank		PA	U.S.	Rank
Doctoral scientists, 1995	21,674	453,928	4	Total R&D performance, 1995 (millions)	\$6,919	\$177,210	8
Doctoral engineers, 1995	3,723	86,738	6	Industry R&D, 1995 (millions)	\$5,331	\$130,332	8
S&E doctorates awarded, 1996	1,312	27,230	6	Academic R&D, 1995 (millions)	\$1,140	\$21,606	6
of which, in engineering	29%	23%		of which, in life sciences	54%	55%	
in life sciences	20%	25%		in engineering	21%	16%	
in social sciences	17%	15%		in math & computer sciences	7%	4%	
S&E postdoctorates, 1995	1,985	35,379	4	Higher education current-fund expenditures, 1995 (millions)	\$10,753	\$182,602	3
in doctorate-granting institutions							
S&E graduate students, 1995	20,445	436,328	7	Number of SBIR awards, 1990-1996	854	26,399	8
in doctorate-granting institutions				Patents issued to state residents, 1996	2,922	61,099	7
Population, 1996 (000s)	12,056	269,067	5	Gross state product, 1994 (billions)	\$294.4	\$6,876.0	6
Civilian labor force, 1996 (000s)	5,903	135,528	6	of which, agriculture	1%	2%	
Personal income per capita, 1996	\$24,668	\$24,231	19	manufacturing, mining, construction	24%	23%	
Federal spending				transportation, communication, utilities	9%	9%	
Total expenditures, 1996 (millions)	\$64,167	\$1,368,858	5	wholesale and retail trade	15%	16%	
R&D obligations, 1995 (millions)	\$2,414	\$67,080	9	finance, insurance, real estate	18%	19%	
				services	21%	20%	
				government	11%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Pennsylvania by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	2,414,250	227,520	21,980	1,251,691	717,636	189,379	6,044	9
Department of Agriculture	39,353	29,389	0	80	9,857	20	7	8
Department of Commerce	13,774	414	0	12,592	350	370	48	19
Department of Defense	1,145,451	125,918	21,980	827,823	112,259	57,471	0	11
Department of Energy	456,708	64,744	0	358,103	26,940	6,921	0	5
Dept. of Health & Human Services	568,929	20	0	10,719	453,136	104,530	524	5
Department of the Interior	6,057	5,085	0	397	547	28	0	22
Department of Transportation	14,483	0	0	5,680	1,989	1,350	5,464	12
Environmental Protection Agency	4,910	0	0	653	3,241	1,016	0	22
Nat'l Aeronautics & Space Admin.	53,225	1,500	0	34,582	15,634	1,508	1	15
National Science Foundation	111,360	450	0	1,062	93,683	16,165	0	5
State rank	9	15	17	9	4	4	7	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

PUERTO RICO

Science and Engineering Profile

	PR	U.S.	Rank		PR	U.S.	Rank
Doctoral scientists, 1995	867	453,928	51	Total R&D performance, 1995 (millions)	na	\$177,210	na
Doctoral engineers, 1995	150	86,738	48	Industry R&D, 1995 (millions)	na	\$130,332	na
S&E doctorates awarded, 1996	33	27,230	50	Academic R&D, 1995 (millions)	\$53	\$21,606	47
of which, in psychology	76%	13%		of which, in life sciences	75%	55%	
in physical sciences	9%	14%		in engineering	6%	16%	
in environmental sciences	9%	3%		in physical sciences	6%	10%	
S&E postdoctorates, 1995	24	35,379	49	Higher education current-fund expenditures, 1995 (millions)	\$947	\$182,602	39
in doctorate-granting institutions							
S&E graduate students, 1995	3,064	436,328	36	Number of SBIR awards, 1990-1996	1	26,399	52
in doctorate-granting institutions				Patents issued to state residents, 1996	23	61,099	52
Population, 1996 (000s)	3,783	269,067	26	Gross state product, 1994 (billions)	\$40.4	\$6,876.0	38
Civilian labor force, 1996 (000s)	1,284	135,528	32	of which, agriculture	1%	2%	
Personal income per capita, 1996	\$7,882	\$24,231	52	manufacturing, mining, construction	44%	23%	
Federal spending				transportation, communication, utilities	8%	9%	
Total expenditures, 1996 (millions)	\$10,304	\$1,368,858	36	wholesale and retail trade	14%	16%	
R&D obligations, 1995 (millions)	\$47	\$67,080	50	finance, insurance, real estate	13%	19%	
				services	11%	20%	
				government	10%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduates students include health fields.

The data source for Puerto Rico's personal income per capita, number of SBIR awards, and gross state product is as follows: Puerto Rico Federal Affairs Administration, Office of the Governor, Washington, D.C.

na = not available

Federal Obligations for Research and Development in Puerto Rico by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	46,657	7,163	7,669	0	29,999	186	1,640	50
Department of Agriculture	9,316	5,176	0	0	4,104	36	0	38
Department of Commerce	400	0	0	0	320	0	80	41
Department of Defense	159	0	0	0	159	0	0	52
Department of Energy	32	0	0	0	32	0	0	52
Dept. of Health & Human Services	21,915	0	0	0	20,630	150	1,135	43
Department of the Interior	2,065	1,987	0	0	78	0	0	45
Department of Transportation	468	0	0	0	43	0	425	51
Environmental Protection Agency	165	0	0	0	165	0	0	48
Nat'l Aeronautics & Space Admin.	0	0	0	0	0	0	0	52
National Science Foundation	12,137	0	7,669	0	4,468	0	0	34
State rank	50	49	18	52	43	52	40	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

RHODE ISLAND

Science and Engineering Profile

	RI	U.S.	Rank		RI	U.S.	Rank
Doctoral scientists, 1995	2,018	453,928	41	Total R&D performance, 1995 (millions)	\$896	\$177,210	33
Doctoral engineers, 1995	483	86,738	36	Industry R&D, 1995 (millions)	\$520	\$130,332	34
S&E doctorates awarded, 1996	191	27,230	35	Academic R&D, 1995 (millions)	\$106	\$21,606	37
of which, in social sciences	21%	15%		of which, in life sciences	31%	55%	
in engineering	18%	23%		in environmental sciences	27%	6%	
in life sciences	18%	25%		in engineering	13%	16%	
S&E postdoctorates, 1995	159	35,379	34	Higher education current-fund expenditures, 1995 (millions)	\$1,012	\$182,602	38
in doctorate-granting institutions							
S&E graduate students, 1995	2,158	436,328	40	Number of SBIR awards, 1990-1996	80	26,399	31
in doctorate-granting institutions				Patents issued to state residents, 1996	235	61,099	37
Population, 1996 (000s)	990	269,067	44	Gross state product, 1994 (billions)	\$23.9	\$6,876.0	46
Civilian labor force, 1996 (000s)	496	135,528	44	of which, agriculture	1%	2%	
Personal income per capita, 1996	\$24,765	\$24,231	18	manufacturing, mining, construction	21%	23%	
Federal spending				transportation, communication, utilities	7%	9%	
Total expenditures, 1996 (millions)	\$5,658	\$1,368,858	43	wholesale and retail trade	15%	16%	
R&D obligations, 1995 (millions)	\$515	\$67,080	25	finance, insurance, real estate	23%	19%	
				services	22%	20%	
				government	12%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Rhode Island by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	515,425	254,302	0	179,292	62,738	16,767	2,326	25
Department of Agriculture	1,537	0	0	0	1,483	54	0	52
Department of Commerce	3,059	544	0	75	2,395	0	45	30
Department of Defense	432,478	242,420	0	177,810	12,125	123	0	18
Department of Energy	2,283	0	0	0	2,268	15	0	45
Dept. of Health & Human Services	37,781	0	0	367	21,756	14,430	1,228	33
Department of the Interior	1,677	1,200	0	38	439	0	0	49
Department of Transportation	1,426	570	0	108	40	0	708	39
Environmental Protection Agency	10,362	9,273	0	364	725	0	0	14
Nat'l Aeronautics & Space Admin.	4,338	295	0	523	3,050	470	0	36
National Science Foundation	20,484	0	0	7	18,457	1,675	345	26
State rank	25	14	na	23	33	21	32	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

SOUTH CAROLINA

Science and Engineering Profile

	SC	U.S.	Rank		SC	U.S.	Rank
Doctoral scientists, 1995	4,143	453,928	29	Total R&D performance, 1995 (millions)	\$996	\$177,210	31
Doctoral engineers, 1995	772	86,738	31	Industry R&D, 1995 (millions)	\$739	\$130,332	30
S&E doctorates awarded, 1996	242	27,230	32	Academic R&D, 1995 (millions)	\$220	\$21,606	29
of which, in life sciences	30%	25%		of which, in life sciences	51%	55%	
in engineering	21%	23%		in engineering	22%	16%	
in social sciences	19%	15%		in environmental sciences	7%	6%	
S&E postdoctorates, 1995	246	35,379	30	Higher education current-fund expenditures, 1995 (millions)	\$2,151	\$182,602	27
in doctorate-granting institutions							
S&E graduate students, 1995	4,173	436,328	32	Number of SBIR awards, 1990-1996	24	26,399	45
in doctorate-granting institutions				Patents issued to state residents, 1996	469	61,099	27
Population, 1996 (000s)	3,699	269,067	27	Gross state product, 1994 (billions)	\$79.9	\$6,876.0	27
Civilian labor force, 1996 (000s)	1,848	135,528	26	of which, agriculture	1%	2%	
Personal income per capita, 1996	\$19,755	\$24,231	42	manufacturing, mining, construction	32%	23%	
Federal spending				transportation, communication, utilities	8%	9%	
Total expenditures, 1996 (millions)	\$18,402	\$1,368,858	27	wholesale and retail trade	16%	16%	
R&D obligations, 1995 (millions)	\$178	\$67,080	37	finance, insurance, real estate services	13%	19%	
				government	15%	20%	
					16%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in South Carolina by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	177,962	34,441	29,858	41,168	65,741	2,732	4,022	37
Department of Agriculture	15,236	8,766	0	0	6,470	0	0	34
Department of Commerce	40,099	12,424	0	23,731	3,441	350	153	8
Department of Defense	34,987	10,527	23	16,040	6,960	1,437	0	34
Department of Energy	38,134	0	29,835	55	8,192	52	0	20
Dept. of Health & Human Services	33,776	50	0	1,016	29,450	655	2,605	38
Department of the Interior	2,784	2,674	0	10	100	0	0	40
Department of Transportation	1,431	0	0	0	373	0	1,058	38
Environmental Protection Agency	465	0	0	0	465	0	0	45
Nat'l Aeronautics & Space Admin.	2,420	0	0	123	1,885	206	206	39
National Science Foundation	8,630	0	0	193	8,405	32	0	39
State rank	37	37	13	33	31	39	17	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

SOUTH DAKOTA

Science and Engineering Profile

	SD	U.S.	Rank		SD	U.S.	Rank
Doctoral scientists, 1995	1,043	453,928	50	Total R&D performance, 1995 (millions)	\$55	\$177,210	51
Doctoral engineers, 1995	77	86,738	52	Industry R&D, 1995 (millions)	\$19	\$130,332	48
S&E doctorates awarded, 1996	24	27,230	52	Academic R&D, 1995 (millions)	\$21	\$21,606	52
of which, in life sciences	63%	25%		of which, in life sciences	58%	55%	
in psychology	17%	13%		in environmental sciences	18%	6%	
in physical sciences	8%	14%		in engineering	12%	16%	
S&E postdoctorates, 1995	17	35,379	51	Higher education current-fund expenditures, 1995 (millions)	\$322	\$182,602	51
in doctorate-granting institutions							
S&E graduate students, 1995	1,286	436,328	46	Number of SBIR awards, 1990-1996	13	26,399	48
in doctorate-granting institutions				Patents issued to state residents, 1996	43	61,099	48
Population, 1996 (000s)	732	269,067	46	Gross state product, 1994 (billions)	\$17.3	\$6,876.0	48
Civilian labor force, 1996 (000s)	390	135,528	46	of which, agriculture	11%	2%	
Personal income per capita, 1996	\$21,516	\$24,231	35	manufacturing, mining, construction	16%	23%	
Federal spending				transportation, communication, utilities	8%	9%	
Total expenditures, 1996 (millions)	\$3,873	\$1,368,858	48	wholesale and retail trade	16%	16%	
R&D obligations, 1995 (millions)	\$26	\$67,080	52	finance, insurance, real estate services	20%	19%	
				government	16%	20%	
					14%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in South Dakota by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	26,492	13,428	0	2,737	8,392	847	1,088	52
Department of Agriculture	5,518	2,495	0	0	3,023	0	0	47
Department of Commerce	10	0	0	0	10	0	0	52
Department of Defense	366	335	0	31	0	0	0	51
Department of Energy	80	0	0	0	80	0	0	50
Dept. of Health & Human Services	2,745	562	0	335	581	847	420	50
Department of the Interior	5,838	3,549	0	2,051	238	0	0	23
Department of Transportation	668	0	0	0	0	0	668	48
Environmental Protection Agency	0	0	0	0	0	0	0	52
Nat'l Aeronautics & Space Admin.	7,760	6,487	0	255	1,018	0	0	31
National Science Foundation	3,507	0	0	65	3,442	0	0	50
State rank	52	46	na	49	52	49	46	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

TENNESSEE

Science and Engineering Profile

	TN	U.S.	Rank		TN	U.S.	Rank
Doctoral scientists, 1995	7,631	453,928	21	Total R&D performance, 1995 (millions)	\$1,402	\$177,210	26
Doctoral engineers, 1995	1,392	86,738	19	Industry R&D, 1995 (millions)	\$1,003	\$130,332	25
S&E doctorates awarded, 1996	350	27,230	24	Academic R&D, 1995 (millions)	\$308	\$21,606	26
of which, in life sciences	26%	25%		of which, in life sciences	60%	55%	
in engineering	24%	23%		in engineering	16%	16%	
in psychology	17%	13%		in physical sciences	7%	10%	
S&E postdoctorates, 1995	465	35,379	23	Higher education current-fund expenditures, 1995 (millions)	\$3,453	\$182,602	19
in doctorate-granting institutions							
S&E graduate students, 1995	7,195	436,328	20	Number of SBIR awards, 1990-1996	260	26,399	24
in doctorate-granting institutions				Patents issued to state residents, 1996	633	61,099	24
Population, 1996 (000s)	5,320	269,067	17	Gross state product, 1994 (billions)	\$126.5	\$6,876.0	18
Civilian labor force, 1996 (000s)	2,751	135,528	19	of which, agriculture	1%	2%	
Personal income per capita, 1996	\$21,764	\$24,231	34	manufacturing, mining, construction	28%	23%	
Federal spending				transportation, communication, utilities	8%	9%	
Total expenditures, 1996 (millions)	\$27,558	\$1,368,858	17	wholesale and retail trade	18%	16%	
R&D obligations, 1995 (millions)	\$582	\$67,080	23	finance, insurance, real estate services	13%	19%	
				government	19%	20%	
					12%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Tennessee by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	581,956	62,100	295,072	34,700	167,951	19,875	2,258	23
Department of Agriculture	9,249	160	0	0	9,089	0	0	39
Department of Commerce	1,115	1,005	0	41	69	0	0	37
Department of Defense	82,725	52,015	9,552	8,751	12,407	0	0	29
Department of Energy	299,627	503	281,993	11,058	6,073	0	0	7
Dept. of Health & Human Services	142,131	1,330	1,128	2,540	117,293	19,508	332	21
Department of the Interior	3,074	2,751	0	35	245	0	43	38
Department of Transportation	3,300	942	418	53	191	0	1,696	29
Environmental Protection Agency	1,101	0	0	208	893	0	0	38
Nat'l Aeronautics & Space Admin.	23,667	3,394	1,919	11,156	6,736	367	95	21
National Science Foundation	15,967	0	62	858	14,955	0	92	28
State rank	23	26	5	36	24	18	33	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

TEXAS

Science and Engineering Profile

	TX	U.S.	Rank		TX	U.S.	Rank
Doctoral scientists, 1995	24,474	453,928	3	Total R&D performance, 1995 (millions)	\$8,385	\$177,210	6
Doctoral engineers, 1995	6,047	86,738	2	Industry R&D, 1995 (millions)	\$6,211	\$130,332	6
S&E doctorates awarded, 1996	1,710	27,230	3	Academic R&D, 1995 (millions)	\$1,472	\$21,606	3
of which, in engineering	29%	23%		of which, in life sciences	60%	55%	
in life sciences	24%	25%		in engineering	16%	16%	
in physical sciences	13%	14%		in environmental sciences	9%	6%	
S&E postdoctorates, 1995	1,932	35,379	5	Higher education current-fund expenditures, 1995 (millions)	\$9,773	\$182,602	4
in doctorate-granting institutions							
S&E graduate students, 1995	26,616	436,328	3	Number of SBIR awards, 1990-1996	914	26,399	7
in doctorate-granting institutions				Patents issued to state residents, 1996	4,171	61,099	3
Population, 1996 (000s)	19,128	269,067	2	Gross state product, 1994 (billions)	\$479.8	\$6,876.0	3
Civilian labor force, 1996 (000s)	9,748	135,528	2	of which, agriculture	2%	2%	
Personal income per capita, 1996	\$22,045	\$24,231	32	manufacturing, mining, construction	27%	23%	
Federal spending				transportation, communication, utilities	11%	9%	
Total expenditures, 1996 (millions)	\$86,496	\$1,368,858	3	wholesale and retail trade	16%	16%	
R&D obligations, 1995 (millions)	\$4,062	\$67,080	4	finance, insurance, real estate	14%	19%	
				services	18%	20%	
				government	12%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Texas by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	4,062,175	537,508	860	2,701,709	649,159	163,001	9,938	4
Department of Agriculture	61,417	43,582	0	160	17,502	145	28	4
Department of Commerce	17,214	2,586	0	12,464	1,769	79	316	16
Department of Defense	1,390,773	146,350	860	1,059,959	80,184	103,420	0	8
Department of Energy	69,130	0	0	40,103	28,155	872	0	15
Dept. of Health & Human Services	443,460	275	0	8,901	398,347	33,585	2,352	6
Department of the Interior	9,248	7,254	0	131	1,863	0	0	16
Department of Transportation	17,447	0	0	8,861	1,825	307	6,454	9
Environmental Protection Agency	16,939	0	0	7,350	8,442	1,015	132	12
Nat'l Aeronautics & Space Admin.	1,956,953	337,461	0	1,562,001	34,312	23,179	0	2
National Science Foundation	79,594	0	0	1,779	76,760	399	656	7
State rank	4	8	19	3	6	6	4	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

UTAH

Science and Engineering Profile

	UT	U.S.	Rank		UT	U.S.	Rank
Doctoral scientists, 1995	3,994	453,928	31	Total R&D performance, 1995 (millions)	\$1,144	\$177,210	29
Doctoral engineers, 1995	929	86,738	27	Industry R&D, 1995 (millions)	\$803	\$130,332	28
S&E doctorates awarded, 1996	300	27,230	27	Academic R&D, 1995 (millions)	\$202	\$21,606	30
of which, in engineering	25%	23%		of which, in life sciences	47%	55%	
in life sciences	21%	25%		in engineering	25%	16%	
in physical sciences	19%	14%		in physical sciences	9%	10%	
S&E postdoctorates, 1995	269	35,379	28	Higher education current-fund expenditures, 1995 (millions)	\$1,846	\$182,602	31
in doctorate-granting institutions							
S&E graduate students, 1995	5,004	436,328	29	Number of SBIR awards, 1990-1996	335	26,399	21
in doctorate-granting institutions				Patents issued to state residents, 1996	540	61,099	25
Population, 1996 (000s)	2,000	269,067	35	Gross state product, 1994 (billions)	\$41.7	\$6,876.0	36
Civilian labor force, 1996 (000s)	998	135,528	35	of which, agriculture	1%	2%	
Personal income per capita, 1996	\$19,156	\$24,231	46	manufacturing, mining, construction	23%	23%	
Federal spending				transportation, communication, utilities	10%	9%	
Total expenditures, 1996 (millions)	\$8,193	\$1,368,858	38	wholesale and retail trade	16%	16%	
R&D obligations, 1995 (millions)	\$371	\$67,080	29	finance, insurance, real estate services	14%	19%	
				government	20%	20%	
					16%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Utah by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	371,208	131,138	0	98,522	128,347	7,730	5,471	29
Department of Agriculture	13,369	7,901	0	0	5,466	0	2	35
Department of Commerce	4,409	0	0	3,963	180	0	266	28
Department of Defense	226,934	117,797	0	86,625	22,512	0	0	23
Department of Energy	16,798	0	0	756	6,936	5,194	3,912	27
Dept. of Health & Human Services	72,831	0	0	4,231	65,836	2,379	385	29
Department of the Interior	5,621	5,233	0	91	297	0	0	24
Department of Transportation	1,417	0	0	34	477	0	906	41
Environmental Protection Agency	1,259	0	0	379	880	0	0	34
Nat'l Aeronautics & Space Admin.	6,762	207	0	1,943	4,455	157	0	35
National Science Foundation	21,808	0	0	500	21,308	0	0	24
State rank	29	22	na	29	28	29	9	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

VIRGINIA

Science and Engineering Profile

	VA	U.S.	Rank		VA	U.S.	Rank
Doctoral scientists, 1995	13,682	453,928	10	Total R&D performance, 1995 (millions)	\$3,897	\$177,210	14
Doctoral engineers, 1995	2,901	86,738	10	Industry R&D, 1995 (millions)	\$1,577	\$130,332	19
S&E doctorates awarded, 1996	634	27,230	14	Academic R&D, 1995 (millions)	\$447	\$21,606	15
of which, in engineering	25%	23%		of which, in life sciences	52%	55%	
in life sciences	19%	25%		in engineering	17%	16%	
in psychology	16%	13%		in environmental sciences	13%	6%	
S&E postdoctorates, 1995	592	35,379	19	Higher education current-fund expenditures, 1995 (millions)	\$4,289	\$182,602	12
in doctorate-granting institutions							
S&E graduate students, 1995	13,014	436,328	10	Number of SBIR awards, 1990-1996	1,413	26,399	3
in doctorate-granting institutions				Patents issued to state residents, 1996	859	61,099	21
Population, 1996 (000s)	6,675	269,067	12	Gross state product, 1994 (billions)	\$177.7	\$6,876.0	13
Civilian labor force, 1996 (000s)	3,389	135,528	12	of which, agriculture	1%	2%	
Personal income per capita, 1996	\$24,925	\$24,231	15	manufacturing, mining, construction	20%	23%	
Federal spending				transportation, communication, utilities	9%	9%	
Total expenditures, 1996 (millions)	\$50,302	\$1,368,858	7	wholesale and retail trade	14%	16%	
R&D obligations, 1995 (millions)	\$3,603	\$67,080	5	finance, insurance, real estate	17%	19%	
				services	19%	20%	
				government	20%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Virginia by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	3,603,023	1,580,530	236,503	1,534,313	206,554	41,651	3,472	5
Department of Agriculture	12,129	787	0	0	10,074	1,177	91	37
Department of Commerce	36,758	5,384	0	27,404	3,801	50	119	9
Department of Defense	2,549,556	1,244,189	168,120	1,097,499	31,792	7,956	0	4
Department of Energy	93,285	9,704	59,031	12,364	7,257	4,929	0	14
Dept. of Health & Human Services	146,354	1,306	0	36,964	98,639	8,209	1,236	20
Department of the Interior	51,152	40,663	0	9,873	567	49	0	1
Department of Transportation	55,657	9,592	9,088	32,991	1,728	250	2,008	4
Environmental Protection Agency	33,901	0	0	31,853	1,165	883	0	4
Nat'l Aeronautics & Space Admin.	563,187	267,607	0	265,384	20,846	9,332	18	4
National Science Foundation	61,044	1,298	264	19,981	30,685	8,816	0	11
State rank	5	4	6	6	19	14	23	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

VERMONT

Science and Engineering Profile

	VT	U.S.	Rank		VT	U.S.	Rank
Doctoral scientists, 1995	1,366	453,928	47	Total R&D performance, 1995 (millions)	\$308	\$177,210	46
Doctoral engineers, 1995	328	86,738	41	Industry R&D, 1995 (millions)	\$248	\$130,332	40
S&E doctorates awarded, 1996	47	27,230	48	Academic R&D, 1995 (millions)	\$54	\$21,606	46
of which, in life sciences	43%	25%		of which, in life sciences	87%	55%	
in psychology	36%	13%		in engineering	4%	16%	
in engineering	13%	23%		in physical sciences	2%	10%	
S&E postdoctorates, 1995	80	35,379	39	Higher education current-fund expenditures, 1995 (millions)	\$605	\$182,602	44
in doctorate-granting institutions							
S&E graduate students, 1995	756	436,328	51	Number of SBIR awards, 1990-1996	72	26,399	33
in doctorate-granting institutions				Patents issued to state residents, 1996	254	61,099	36
Population, 1996 (000s)	589	269,067	50	Gross state product, 1994 (billions)	\$13.3	\$6,876.0	52
Civilian labor force, 1996 (000s)	324	135,528	49	of which, agriculture	2%	2%	
Personal income per capita, 1996	\$22,124	\$24,231	31	manufacturing, mining, construction	22%	23%	
Federal spending				transportation, communication, utilities	9%	9%	
Total expenditures, 1996 (millions)	\$2,775	\$1,368,858	51	wholesale and retail trade	17%	16%	
R&D obligations, 1995 (millions)	\$54	\$67,080	48	finance, insurance, real estate	17%	19%	
				services	20%	20%	
				government	12%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Vermont by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	53,590	4,702	0	13,358	33,514	1,413	603	48
Department of Agriculture	5,785	1,598	0	0	4,175	12	0	46
Department of Commerce	45	0	0	0	45	0	0	49
Department of Defense	13,573	1,444	0	10,885	1,244	0	0	41
Department of Energy	534	0	0	0	534	0	0	48
Dept. of Health & Human Services	26,937	0	0	1,376	24,027	1,401	133	41
Department of the Interior	1,804	1,660	0	66	78	0	0	47
Department of Transportation	419	0	0	0	0	0	419	52
Environmental Protection Agency	51	0	0	0	0	0	51	50
Nat'l Aeronautics & Space Admin.	663	0	0	574	89	0	0	50
National Science Foundation	3,779	0	0	457	3,322	0	0	49
State rank	48	51	na	40	41	44	51	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

WASHINGTON

Science and Engineering Profile

	WA	U.S.	Rank		WA	U.S.	Rank
Doctoral scientists, 1995	10,899	453,928	15	Total R&D performance, 1995 (millions)	\$5,241	\$177,210	11
Doctoral engineers, 1995	1,935	86,738	14	Industry R&D, 1995 (millions)	\$4,294	\$130,332	9
S&E doctorates awarded, 1996	454	27,230	21	Academic R&D, 1995 (millions)	\$486	\$21,606	13
of which, in life sciences	27%	25%		of which, in life sciences	64%	55%	
in engineering	23%	23%		in environmental sciences	11%	6%	
in social sciences	16%	15%		in engineering	9%	16%	
S&E postdoctorates, 1995	1,010	35,379	12	Higher education current-fund expenditures, 1995 (millions)	\$3,321	\$182,602	20
in doctorate-granting institutions							
S&E graduate students, 1995	6,051	436,328	24	Number of SBIR awards, 1990-1996	571	26,399	12
in doctorate-granting institutions				Patents issued to state residents, 1996	1,142	61,099	17
Population, 1996 (000s)	5,533	269,067	15	Gross state product, 1994 (billions)	\$143.9	\$6,876.0	14
Civilian labor force, 1996 (000s)	2,887	135,528	17	of which, agriculture	3%	2%	
Personal income per capita, 1996	\$24,838	\$24,231	16	manufacturing, mining, construction	19%	23%	
Federal spending				transportation, communication, utilities	8%	9%	
Total expenditures, 1996 (millions)	\$29,246	\$1,368,858	16	wholesale and retail trade	18%	16%	
R&D obligations, 1995 (millions)	\$1,128	\$67,080	16	finance, insurance, real estate	18%	19%	
				services	19%	20%	
				government	15%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Washington by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	1,127,750	159,837	204,972	329,654	330,375	95,900	7,012	16
Department of Agriculture	36,622	21,057	0	0	15,386	0	179	11
Department of Commerce	58,453	54,119	0	1,975	2,212	0	147	4
Department of Defense	346,330	70,327	2,678	234,334	36,661	2,330	0	20
Department of Energy	231,267	559	194,003	17,787	17,835	103	980	9
Dept. of Health & Human Services	308,384	17	7,088	8,540	198,756	90,090	3,893	9
Department of the Interior	14,880	12,570	0	47	2,263	0	0	7
Department of Transportation	4,378	0	1,203	943	733	118	1,381	26
Environmental Protection Agency	2,145	0	0	52	861	900	332	29
Nat'l Aeronautics & Space Admin.	77,434	1,188	0	64,023	11,897	326	0	12
National Science Foundation	47,857	0	0	1,953	43,771	2,033	100	16
State rank	16	19	7	18	10	8	5	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

WISCONSIN

Science and Engineering Profile

	WI	U.S.	Rank		WI	U.S.	Rank
Doctoral scientists, 1995	6,899	453,928	23	Total R&D performance, 1995 (millions)	\$2,226	\$177,210	22
Doctoral engineers, 1995	962	86,738	26	Industry R&D, 1995 (millions)	\$1,706	\$130,332	18
S&E doctorates awarded, 1996	577	27,230	16	Academic R&D, 1995 (millions)	\$473	\$21,606	14
of which, in life sciences	30%	25%		of which, in life sciences	60%	55%	
in engineering	22%	23%		in engineering	13%	16%	
in social sciences	16%	15%		in physical sciences	9%	10%	
S&E postdoctorates, 1995	687	35,379	16	Higher education current-fund expenditures, 1995 (millions)	\$3,768	\$182,602	16
in doctorate-granting institutions							
S&E graduate students, 1995	8,621	436,328	18	Number of SBIR awards, 1990-1996	202	26,399	25
in doctorate-granting institutions				Patents issued to state residents, 1996	1,321	61,099	13
Population, 1996 (000s)	5,160	269,067	18	Gross state product, 1994 (billions)	\$125.3	\$6,876.0	19
Civilian labor force, 1996 (000s)	2,918	135,528	15	of which, agriculture	2%	2%	
Personal income per capita, 1996	\$23,269	\$24,231	24	manufacturing, mining, construction	32%	23%	
Federal spending				transportation, communication, utilities	7%	9%	
Total expenditures, 1996 (millions)	\$19,959	\$1,368,858	24	wholesale and retail trade	15%	16%	
R&D obligations, 1995 (millions)	\$347	\$67,080	30	finance, insurance, real estate services	16%	19%	
				government	16%	20%	
					11%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Wisconsin by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	347,089	40,344	0	35,934	260,374	6,720	3,717	30
Department of Agriculture	34,643	23,843	0	404	10,351	10	35	12
Department of Commerce	5,144	625	0	2,381	2,138	0	0	27
Department of Defense	30,945	971	0	9,003	20,971	0	0	36
Department of Energy	19,040	240	0	0	18,800	0	0	26
Dept. of Health & Human Services	161,351	0	0	1,797	150,985	6,623	1,946	18
Department of the Interior	12,607	12,246	0	0	292	0	69	11
Department of Transportation	5,587	2,419	0	515	1,091	0	1,562	24
Environmental Protection Agency	2,010	0	0	0	1,905	0	105	30
Nat'l Aeronautics & Space Admin.	35,932	0	0	21,737	14,108	87	0	17
National Science Foundation	39,830	0	0	97	39,733	0	0	18
State rank	30	34	na	35	13	30	19	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

WEST VIRGINIA

Science and Engineering Profile

	WV	U.S.	Rank		WV	U.S.	Rank
Doctoral scientists, 1995	1,787	453,928	43	Total R&D performance, 1995 (millions)	\$475	\$177,210	39
Doctoral engineers, 1995	402	86,738	39	Industry R&D, 1995 (millions)	\$243	\$130,332	41
S&E doctorates awarded, 1996	66	27,230	41	Academic R&D, 1995 (millions)	\$53	\$21,606	47
of which, in life sciences	30%	25%		of which, in life sciences	47%	55%	
in engineering	29%	23%		in engineering	23%	16%	
in social sciences	14%	15%		in environmental sciences	12%	6%	
S&E postdoctorates, 1995	26	35,379	48	Higher education current-fund expenditures, 1995 (millions)	\$848	\$182,602	41
in doctorate-granting institutions							
S&E graduate students, 1995	2,236	436,328	39	Number of SBIR awards, 1990-1996	8	26,399	51
in doctorate-granting institutions				Patents issued to state residents, 1996	114	61,099	42
Population, 1996 (000s)	1,826	269,067	36	Gross state product, 1994 (billions)	\$34.7	\$6,876.0	41
Civilian labor force, 1996 (000s)	808	135,528	38	of which, agriculture	1%	2%	
Personal income per capita, 1996	\$18,444	\$24,231	50	manufacturing, mining, construction	31%	23%	
Federal spending				transportation, communication, utilities	13%	9%	
Total expenditures, 1996 (millions)	\$10,060	\$1,368,858	37	wholesale and retail trade	14%	16%	
R&D obligations, 1995 (millions)	\$296	\$67,080	31	finance, insurance, real estate	11%	19%	
				services	16%	20%	
				government	13%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in West Virginia by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	296,347	139,595	29,597	83,116	35,132	5,999	2,908	31
Department of Agriculture	20,837	15,777	0	0	3,743	1,197	120	22
Department of Commerce	153	0	0	0	153	0	0	46
Department of Defense	17,014	6,738	0	4,310	1,581	4,385	0	40
Department of Energy	134,360	58,324	0	70,674	5,362	0	0	12
Dept. of Health & Human Services	59,614	51,434	0	97	6,472	297	1,314	31
Department of the Interior	6,377	6,262	0	22	93	0	0	20
Department of Transportation	2,611	0	0	1,291	125	0	1,195	30
Environmental Protection Agency	10	0	0	0	0	10	0	51
Nat'l Aeronautics & Space Admin.	22,831	1,060	0	6,722	14,939	110	0	22
National Science Foundation	32,540	0	29,597	0	2,664	0	279	21
State rank	31	20	15	30	40	33	28	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

WYOMING

Science and Engineering Profile

	WY	U.S.	Rank		WY	U.S.	Rank
Doctoral scientists, 1995	720	453,928	52	Total R&D performance, 1995 (millions)	\$87	\$177,210	50
Doctoral engineers, 1995	117	86,738	51	Industry R&D, 1995 (millions)	\$25	\$130,332	47
S&E doctorates awarded, 1996	53	27,230	45	Academic R&D, 1995 (millions)	\$40	\$21,606	50
of which, in life sciences	21%	25%		of which, in life sciences	45%	55%	
in engineering	17%	23%		in environmental sciences	23%	6%	
in math & computer sciences	17%	8%		in physical sciences	8%	10%	
S&E postdoctorates, 1995	45	35,379	45	Higher education current-fund expenditures, 1995 (millions)	\$305	\$182,602	52
in doctorate-granting institutions							
S&E graduate students, 1995	939	436,328	49	Number of SBIR awards, 1990-1996	9	26,399	50
in doctorate-granting institutions				Patents issued to state residents, 1996	33	61,099	51
Population, 1996 (000s)	481	269,067	52	Gross state product, 1994 (billions)	\$15.7	\$6,876.0	50
Civilian labor force, 1996 (000s)	258	135,528	52	of which, agriculture	2%	2%	
Personal income per capita, 1996	\$21,245	\$24,231	36	manufacturing, mining, construction	38%	23%	
Federal spending				transportation, communication, utilities	17%	9%	
Total expenditures, 1996 (millions)	\$2,515	\$1,368,858	52	wholesale and retail trade	10%	16%	
R&D obligations, 1995 (millions)	\$35	\$67,080	51	finance, insurance, real estate services	11%	19%	
				government	9%	20%	
					13%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Wyoming by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	35,151	8,669	0	223	12,680	12,628	951	51
Department of Agriculture	6,556	4,603	0	0	1,935	18	0	43
Department of Commerce	57	0	0	0	0	0	57	48
Department of Defense	2,154	327	0	13	1,814	0	0	49
Department of Energy	5,268	0	0	55	1,213	3,950	50	41
Dept. of Health & Human Services	1,097	0	0	0	815	50	232	52
Department of the Interior	4,089	3,739	0	0	350	0	0	31
Department of Transportation	9,222	0	0	0	0	8,610	612	17
Environmental Protection Agency	477	0	0	0	477	0	0	44
Nat'l Aeronautics & Space Admin.	806	0	0	55	751	0	0	48
National Science Foundation	5,425	0	0	100	5,325	0	0	47
State rank	51	48	na	51	51	23	47	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable